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Intended for use in planning health programs and as baseline data for research studies and other investigations, the data presented were gathered from studies, surveys, and publications of the Division of Nursing and state and national agencies, as well as from nursing, hospital, and medical organizations. Parts I, II, and III deal with professional nurses: general distribution, numbers registered, licenses issued, age, marital status, field of practice, type of position, full and part time employment, and highest academic credentials. Part IV deals with professional nurse education: initial programs, post registered nurse programs and instructors. Part V concerns practical nursing and practical nurse education: general distribution of practical nurses, licenses issued, and educational programs. Part VI concerns hospital personnel: professional nursing personnel, nonprofessional nursing personnel, nurse-patient ratios, and supervisory-staff ratios. Part XII concerns professional nurses in public health and occupational health: General distribution and educational preparation. The final section projects professional nurse supply and needs. (JK)

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health manpower SOURCE BOOK

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section 2
NURSING PERSONNEL

REVISED JANUARY 1966

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U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE
Public Health Service

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HEALTH MANPOWER SOURCE BOOK.

Section 2. Nursing Personnel. (Revised January 1966)

Prepared by

2) Division of Nursing FGK 74237

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
3 Public Health Service (DHEW)
Washington, D.C. 20201

This source book of data on nursing personnel has been prepared in the Manpower Analysis and Resources Branch of the Division of Nursing by Dr. Eugene Levine, Branch Chief; Helen H. Hudson, Public Health Analyst; and Norman W. Staehling, Statistician (Health).

1798

Public Health Service Publication No. 263, Section 2, Revised January 1966

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FOREWORD

Data on the number, distribution, and characteristics of nursing personnel are essential in planning new health programs, in evaluating the outcome of these programs, and as baseline data for research studies and other investigations. Within the Public Health Service, the Division of Nursing is responsible for the compilation and analysis of these data. They are used extensively not only for the program needs of the Division, but also by other units of the U.S. Department of Health, Education, and Welfare, the various Government agencies, and public and private organizations concerned with health manpower.

In the past, estimates on nurse manpower had to be based on information collected from a variety of sources—nursing organizations, hospital and medical associations, divisions of the Public Health Service and other Federal components, and State agencies. *Health Manpower Source Book, Section 2: Nursing Personnel*, published in May 1953 (Public Health Service Publication No. 263), provided for the first time a systematic organization of these estimates and included analyses of the data interrelated with the total picture of nurse manpower in the United States.

Since then, the increased number and expanded content of various studies, surveys, and publications of this Division, and of State and National agencies which collect data on nurse supply, have provided additional manpower statistics and identified gaps in reporting. Beginning with 1954, statisticians from these organizations have met with the Division manpower specialists periodically in order to improve the quality of nursing statistics. Part III presents details of the biennial estimates of professional nurse supply prepared by this Interagency Conference on Nursing Statistics.

In the 10 years since the first biennial estimate was made, the number of professional nursing personnel in active practice has increased by 45 percent. In 1964, there were 582,000 professional nurses actively engaged in nursing. In addition, 250,000 practical nurses were performing nursing duties and approximately 500,000 aides, orderlies and attendants, including about 6,000 homemakers or home health aides, were employed for ancillary services.

Therefore, this revision of Section 2 of the Source Book Series presents a considerably expanded content of nurse manpower information. It includes a continuation of the trend data by States, and a discussion of similarities, differences, and limitations of the various surveys concerned with nursepower. The part on projections defines in terms of potential supply and educational objectives the numerical goals determined in 1962 by the Surgeon General's Consultant Group on Nursing.

The Division of Nursing plans to continue its intensive study of the manpower situation in nursing and to conduct studies in areas where information on nursing personnel is lacking or incomplete. Some of these would include data on the characteristics of nurses in private duty, doctors' and dentists' offices, and on ancillary personnel.

Jessie M. Scott

JESSIE M. SCOTT,
Chief, Division of Nursing.

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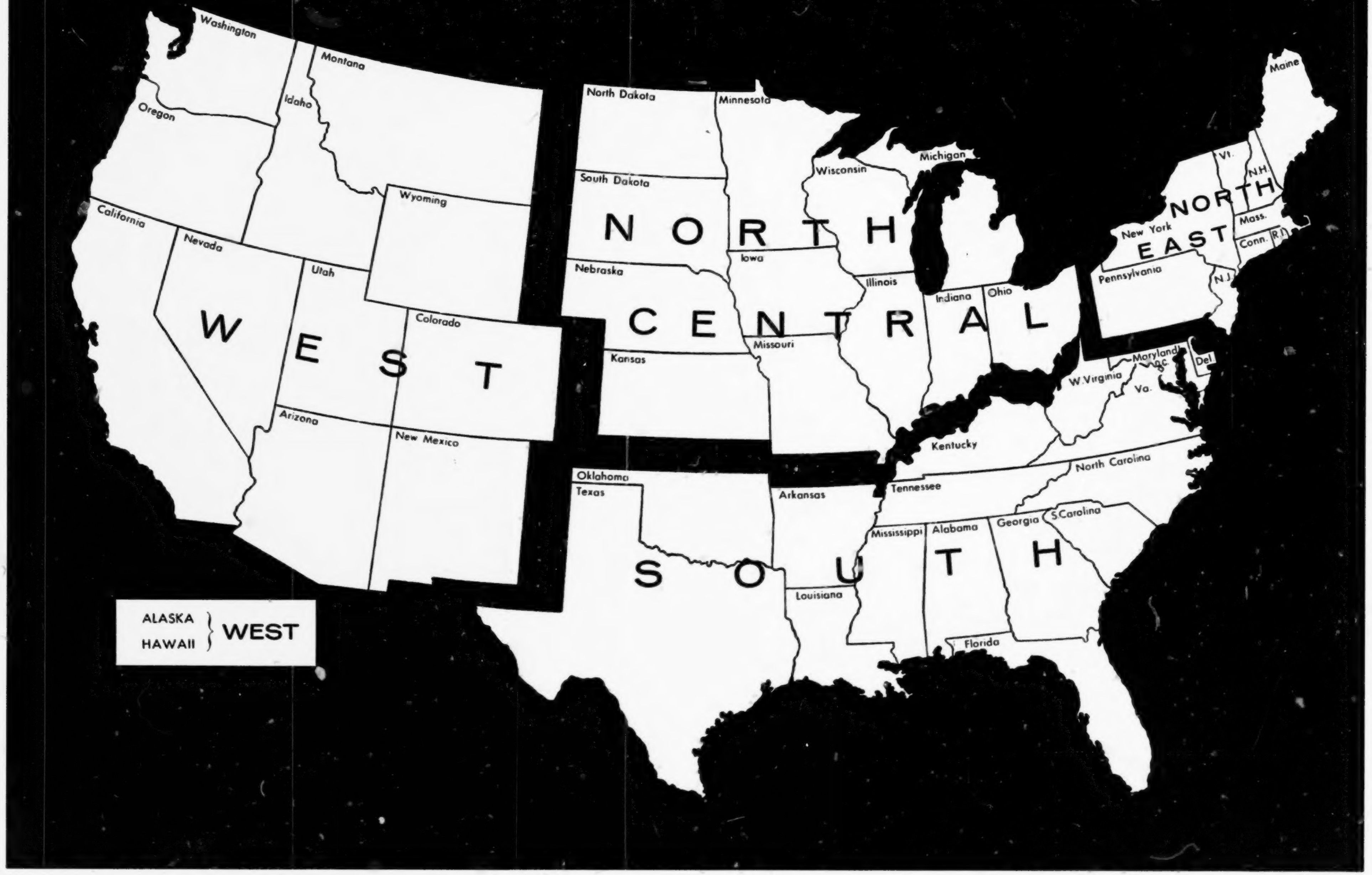
CENSUS REGIONS OF THE UNITED STATES


WEST
NORTH CENTRAL
NORTH EAST
SOUTH
Washington
Oregon
California
Idaho
Montana
Nevada
Utah
Wyoming
Colorado
Arizona
New Mexico
North Dakota
South Dakota
Nebraska
Kansas
Minnesota
Iowa
Missouri
Wisconsin
Illinois
Michigan
Indiana
Ohio
Oklahoma
Texas
Arkansas
Louisiana
Kentucky
Tennessee
Mississippi
Alabama
Georgia
Florida
S.Carolina
North Carolina
W.Virginia
Va.
Maryland
D.C.
Del.
New York
Pennsylvania
N.J.
Vt.
N.H.
Maine
Mass.
Conn.
R.I.
ALASKA
HAWAII
WEST

EXPLANATORY NOTES

Tabular material in this Source Book (Section 2—revised) is presented in eight parts. Each set of tables is preceded by a discussion of the methods used in making estimates, evaluation of the reliability of sources, and background material needed for accurate interpretation of the figures. Each table should therefore be considered in relation to the text and to the definition of terms presented. Duplication of tables contained in current nursing publications has been avoided unless these are necessary for comparison or to maintain trend information.

United States is defined throughout this report as the present 50 States and the District of Columbia. Territories are listed wherever information is available, but the figures are not included in the U.S. totals unless specifically indicated.

The tabular material is presented by State and geographic region wherever possible. The four regions are those used by the Bureau of the Census and comprise the following States:

Northeast

Connecticut
Maine
Massachusetts
New Hampshire
New Jersey
New York
Pennsylvania
Rhode Island
Vermont

North Central

Illinois
Indiana
Iowa
Kansas
Michigan
Minnesota
Missouri
Nebraska
North Dakota
Ohio
South Dakota
Wisconsin

South

Alabama
Arkansas
Delaware
District of Columbia
Florida
Georgia
Kentucky
Louisiana
Maryland
Mississippi
North Carolina
Oklahoma
South Carolina
Tennessee
Texas
Virginia
West Virginia

West

Alaska
Arizona
California
Colorado
Hawaii
Idaho
Montana
Nevada
New Mexico
Oregon
Utah
Washington
Wyoming

The following symbols are used in the tables of this report:

. . . Data not available, not reported, or unknown.
— None or not applicable.

PART I

PROFESSIONAL NURSES

General Distribution

This part is concerned with two major sources of statistics on nurse supply in the United States by State and census region: Census Bureau enumerations of professional nurses (tables 1 and 2), and the four inventories of professional registered nurses compiled by the American Nurses' Association from questionnaires distributed by the State boards of nursing (tables 3, 4 and 5).

The numbers of new licenses issued by the various States are also reported by the State boards of nursing which are the official licensing agencies for nurses (table 6).

The Bureau of Census statistics were collected during the decennial censuses by self-enumeration and/or direct interviewing, and the data provided by respondents were accepted as correct. By the Census Bureau definition, an active professional nurse is one who is either working as a nurse or seeking employment as a nurse. In the 1953 edition of the Health Manpower Source Book 2, the number of professional nurses for each State had been estimated from the 1910–40 census data by subtracting from the number of nurses reported by the Census Bureau the number of student nurses known from other sources to have been enrolled in the schools of each State. In 1950, the Census Bureau counted the two groups separately, but the age distribution of professional nurses suggested that many students were counted as professional nurses. In the previous edition, adjustments were made in terms of this evidence.[1]

The 1960 figures were examined thoroughly and compared with other available data on nurse supply by members of the Interagency Conference on Nursing Statistics (see part III). Their opinion was that the census count of persons employed as professional nurses in 1960 (582,379) was high, and the number of nursing students (57,340) exceptionally low in comparison with other manpower data concerned with nurses. Part of the discrepancy may be due to the fact that no distinction is made between registered and unregistered nurses on the census form. The inventory, on the other hand, counts only registered nurses holding a current license to practice. Moreover, some difference may have resulted from varied interpretations of definitions for nursing occupations; e.g., some male attendants in hospitals, practical nurses, and other nursing personnel may have considered themselves professional nurses, or respondents may not have been sufficiently specific for precise classification.

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[1] Tibbitts, Helen G., and Levine, Eugene. Health Manpower Source Book, Section 2—Nursing Personnel. Public Health Service Publication No. 263. Washington, U.S. Government Printing Office, 1953, p. 14.

The undercount of student nurses, however, leads us to believe that the major source of reporting error may have been that, on the self-enumeration form, students taking clinical training or field practice either reported themselves as professional nurses or were not specific enough in answering the question on occupation. Therefore, in this report adjustments have been made for each State and for the country by subtracting from the census statistics on professional nurses the difference between the known nursing school enrollments on October 15, 1959, and the number of professional nurse students reported in the 1960 census. The use of the October enrollment figure (114,345 total excluding Puerto Rico)[2] assumes that new admissions to schools between October 15 and the April census date would be offset by an equal number of graduations and/or dropouts.

While the results of the adjustments in census figures are only approximations, they nevertheless appear reasonable and are consistent with data from the inventories, which include only registered professional nurses.

By the decennial census of 1960, the professional nurse supply of the country had grown to more than 10 times the number reported 50 years before (table 1). The ratio of active professional nurses to population of the United States has increased in every decade (table 2). Between 1930 and 1950, the rate of increase in this ratio dropped considerably, but rose slightly between 1950 and 1960. Figure 1 shows the percentage increase in the ratios of nurses to 100,000 population during each decade since 1910.

This national trend has been reflected in each of the four geographic regions since 1920, with slight variation in each State. In recent years the differences among the States in nurse-to-population ratios have become less striking, because States with smaller ratios have generally improved more rapidly than those with higher ratios.

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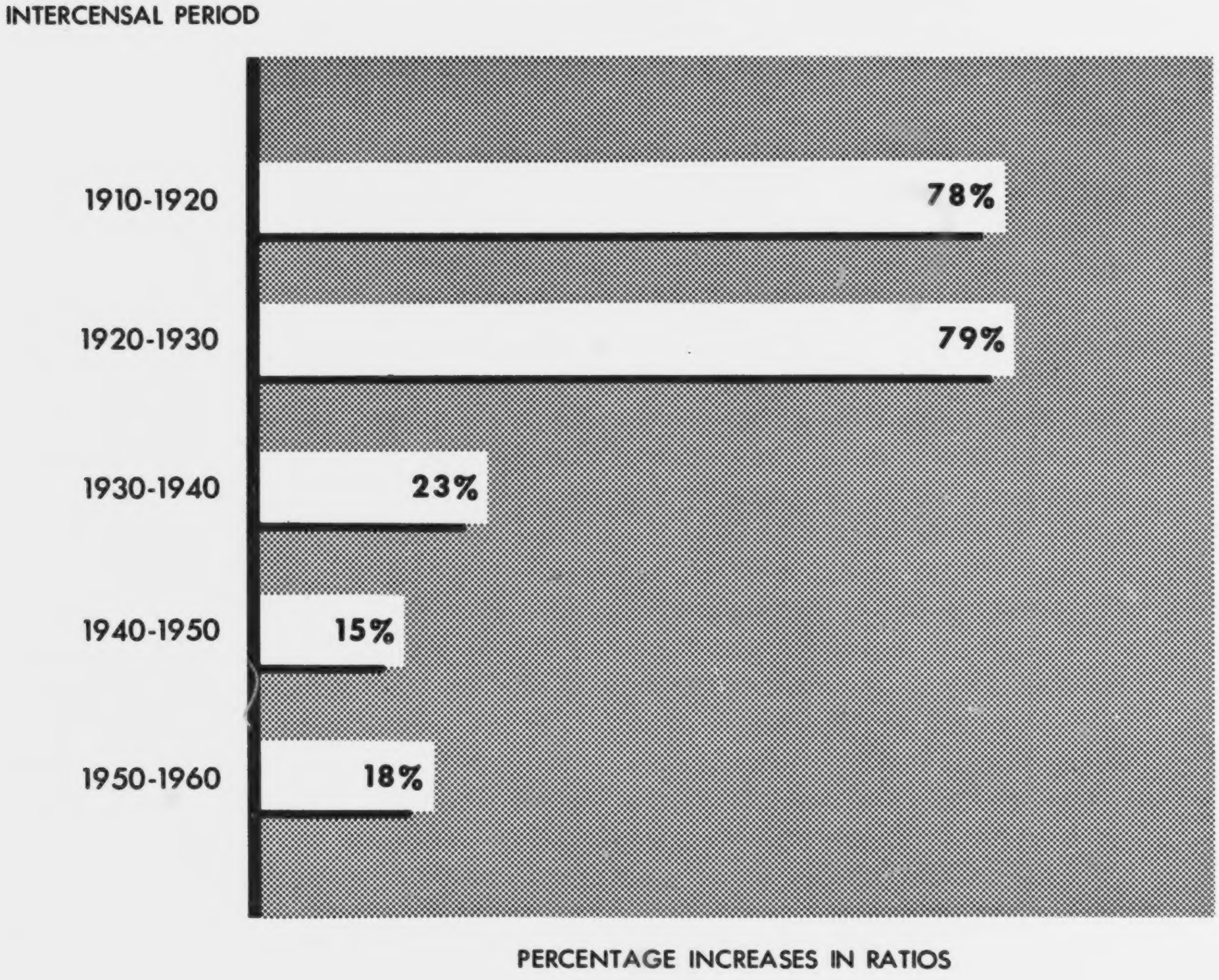
[2] National League for Nursing. State-Approved Schools of Professional Nursing. New York, The League, 1960, p. 38.

Figure 1. Percentage increases in professional nurse-population ratios have dropped considerably since 1910–20.



Registered Professional Nurses

Four inventories of registered professional nurses have been compiled by the American Nurses' Association—the latest, in 1962, under contract with the Public Health Service. Currently, these inventories are based on a standard set of questions prepared by the American Nurses' Association. For the most part, the questions are part of the application form, distributed by the State licensing agencies and completed by the nurse for her license, either new or renewal. The nurses are counted in the State in which they are employed, or in which they reside if not employed. Puerto Rico is not included in the inventories because prior to July 1, 1965, reregistration was not required except upon change of address.

Basic to any count of nurses is the problem of duplication among the States, since many nurses maintain licenses in more than one State. Other nurses, although registered in some States, are not registered in the State in which they are located. Previous inventories have eliminated duplicates by comparing the name and address of the nurse. However, duplicates might not be found under this system if a nurse married and was issued one license under her maiden name and another under her married name. It is hoped that the procedures for locating and eliminating duplications will be more accurate and be simplified in future inventories by the use of social security numbers.

Another major problem is that of nonresponse, either to entire questionnaires when these are separate from the license application form or to specific questions. In 1949 and 1951, the inventories were based completely on special questionnaire surveys, and the final data contained adjustments for nonresponse to the questionnaires. All nurses in the final estimates were classified as either active or inactive. The figures for 1957 (the year used in this report as a reference point for the American Nurses' Association inventory of 1956–58) and for 1962 show only the active and inactive nurses (tables 3 and 4). These tables do not include those nurses who did not respond to the question on activity status (approximately 5 percent and 4 percent of the United States total for these respective years). The actual count of these nonresponses is shown with the grand totals of registered nurses in table 5a.

Analysis of trends must take into account the differences in methods of collecting the data, improved procedures in eliminating duplications since the 1957 inventory, changes in methods of data processing, and any necessary adjustments made for nonresponse. The total number of registered professional nurses (table 3) has increased with each inventory. This is true for both active and inactive nurses for the United States as a whole, as well as for each of the four geographic regions. All of the States have shown an overall increase in the number of active nurses, but there is considerable variation among the States in the numbers inactive. This variation is to be expected because, by definition, the inventories are limited to a count of *registered* professional nurses; i.e., those who maintain a current license to practice in some State in the United States. Little is known about the location of inactive professional nurses who are not currently licensed unless individual States maintain such information.

The ratio of active registered nurses per 100,000 population has increased in all regions (table 4). Considerable variation in the State by State trends may be due to any of the limitations inherent in the data, or in some cases may reflect real changes. The ratios of inactive nurses per 100,000 population are, again, related only to those nurses who maintain a current license in their State of residence.

A recent report which uses raw data from the 1962 Inventory of Professional Registered Nurses is Health Manpower Source Book 19.[3] This publication presents the location of health manpower in eight occupations by county, trading area, standard metropolitan statistical area, and other variables pertinent to the organization of community health services.

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[3] Pennell, Maryland Y. and Baker, Kathryn I.: Health Manpower Source Book 19—Location of Manpower in 8 Health Occupations, 1962. Public Health Service Publication No. 263, Section 19. Washington, U.S. Government Printing Office, 1965, 167 pp.

The data on nurses in Source Book 19 were tabulated according to *the place where the nurse resided* in contrast to the inventory report in which tables are shown *by State of employment.* In addition, for the report of the 1962 inventory, 32,594 registered nurses not answering the question of activity status were distributed to active and inactive supply in the same proportion as those responding to the question. Moreover, figures for Illinois, where only 65 percent of the licensees sent in any information, were adjusted for nonresponse to all questions.[4] In Source Book 19, nurses who did not report activity status were presumed to be active, and no additional adjustment was made for the nonresponse in Illinois.

Table 5b compares these two sets of figures. Differences in the figures are evident (a) in those States where sizeable numbers did not report their activity status, (b) where nurses living in areas near State borders may have been working in the State adjacent to their place of residence, and (c) in Illinois where a large proportion of registered nurses did not supply any information for the inventory.

Table 5b also contains a third set of adjusted figures. These bring the State counts contained in the 1962 inventory report in line with the national estimate of active nurses made by the Interagency Conference on Nursing Statistics—550,000 nurses in practice as of January 1, 1962. To obtain these figures, the number of nonrespondents to the activity status question in each State who were estimated to be active was multiplied by the factor 0.86103. This factor represents the proportion of these nonrespondents needed to bring the national total of 532,118 registered nurses known to be active up to the interagency estimate of 550,000. The resulting figures were then added to the numbers known to be active in each State.

New Registrations

One indicator of the number of nurses added to the nurse supply is the number of new registrations for professional licensure. Table 6 shows the number of nurses licensed in each State for the first time in selected years, and the proportion of these licensed by examination. Table 7 shows the number of licenses issued for the first time in the United States to professional nurses on the basis of a license or certificate from a foreign country. The numbers of such licenses issued increased almost 300 percent between 1950 and 1963.

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[4] Marshall, Eleanor D., and Moses, Evelyn B. The Nation's Nurses. Inventory of Professional Registered Nurses. New York: American Nurses' Association, 1965, pp. 7 and 24.

TABLES IN PART I

Professional Nurses

Table 1. Number of active professional nurses, by region and State: Census years 1910–60

Table 2. Active professional nurses per 100,000 population, by region and State: Census years 1910–60

Table 3. Number of registered nurses—active and inactive—by region and State: 1949, 1951, 1957, and 1962

Table 4. Registered nurse-population ratios, by region and State: 1949, 1951, 1957, and 1962

Table 5a. Registered professional nurses employed or resident in each State and region, by activity status: 1957 and 1962

Table 5b. Adjusted numbers of active registered professional nurses, by State of residence and by State of employment: 1962

Table 6. Professional nurses licensed for the first time, and proportion by examination, by region and State: selected years 1945–63

Table 7. Licenses issued for the first time in the United States to professional nurses on basis of a license or certificate issued by foreign country: 1950–63

Table 1.—Number of active [1] professional nurses, by region and State: Census years 1910–60

Region and State	1910	1920	1930	1940	1950	1960
United Sta[illegible]	50, 476	103, 879	214, 292	284, 159	374, 584	525, 374
Northeast	19, 346	39, 542	82, 288	109, 268	126, 573	155, 821
North Central	14, 081	29, 660	61, 527	77, 504	103, 440	139, 572
South	9, 963	19, 886	39, 364	55, 867	82, 289	134, 578
West	7, 086	14, 791	31, 113	41, 520	62, 282	95, 403
Alabama	523	1, 023	1, 834	2, 392	4, 053	6, 791
Alaska	. . .	75	. . .	. . .	406	612
Arizona	195	406	943	1, 294	2, 201	4, 219
Arkansas	268	463	1, 172	1, 572	1, 866	3, 278
California	3, 287	7, 261	19, 704	25, 795	37, 040	57, 464
Colorado	833	1, 470	1, 920	2, 898	4, 161	6, 128
Connecticut	1, 004	1, 976	4, 873	6, 168	8, 155	10, 292
Delaware	137	137	330	592	982	1, 550
District of Columbia	457	1, 458	1, 918	3, 225	3, 318	2, 928
Florida	323	877	2, 301	4, 259	7, 208	15, 249
Georgia	1, 008	1, 750	2, 826	3, 458	5, 016	8, 322
Hawaii	. . .	233	697	. . .	1, 267	1, 677
Idaho	224	490	563	767	1, 286	1, 834
Illinois	2, 303	7, 142	13, 920	17, 381	21, 872	28, 497
Indiana	1, 071	1, 862	3, 756	5, 173	7, 727	11, 680
Iowa	890	2, 125	3, 594	3, 751	5, 770	7, 782
Kansas	849	1, 199	2, 262	2, 577	4, 170	6, 612
Kentucky	665	1, 239	1, 879	2, 946	3, 818	5, 857
Louisiana	498	919	1, 891	3, 165	4, 639	6, 503
Maine	500	939	1, 602	1, 961	2, 755	3, 203
Maryland	1, 051	1, 937	3, 748	4, 870	6, 200	9, 861
Massachusetts	3, 078	6, 025	13, 213	17, 478	19, 549	21, 025
Michigan	1, 041	2, 896	8, 727	11, 515	15, 583	21, 310
Minnesota	1, 360	2, 679	5, 286	7, 059	8, 601	11, 178
Mississippi	266	540	1, 181	1, 454	2, 247	4, 445
Missouri	1, 575	2, 662	4, 896	6, 282	7, 834	10, 508
Montana	309	682	904	1, 111	1, 534	2, 161
Nebraska	580	1, 097	2, 021	1, 967	2, 718	3, 881
Nevada	83	103	201	291	507	838
New Hampshire	174	559	1, 139	1, 507	2, 017	2, 691
New Jersey	1, 809	3, 208	8, 418	11, 407	13, 766	19, 433
New Mexico	192	298	481	760	1, 268	2, 494
New York	9, 087	17, 433	33, 979	47, 437	49, 241	59, 384
North Carolina	645	1, 431	3, 329	4, 716	6, 806	9, 894
North Dakota	358	443	854	758	1, 077	1, 269
Ohio	2, 580	4, 776	11, 143	14, 010	18, 853	25, 238
Oklahoma	426	921	2, 081	2, 531	3, 685	5, 878
Oregon	674	1, 086	2, 144	2, 871	4, 353	5, 629
Pennsylvania	3, 034	8, 283	16, 838	20, 645	27, 537	35, 933
Rhode Island	370	626	1, 487	1, 784	2, 178	2, 419
South Carolina	287	1, 052	1, 601	2, 225	3, 193	5, 405
South Dakota	246	416	831	836	1, 305	1, 330
Tennessee	742	1, 233	2, 529	3, 248	5, 129	7, 632
Texas	1, 188	2, 439	5, 853	8, 832	14, 109	26, 081
Utah	105	270	619	891	1, 437	1, 854
Vermont	290	493	739	881	1, 375	1, 441
Virginia	1, 058	1, 753	3, 084	4, 355	6, 662	10, 858
Washington	1, 113	2, 628	3, 306	4, 369	7, 817	9, 585
West Virginia	421	714	1, 807	2, 027	3, 358	4, 046
Wisconsin	1, 228	2, 363	4, 237	6, 195	7, 930	10, 287
Wyoming	71	97	328	473	678	908
American Samoa	—	—	—	—	—	94
Puerto Rico	—	362	921	—	1, 603	2, 180

[1] Data for 1910–30 are for nurses who are gainfully employed; for 1940 they include also nurses who are seeking work; for 1950 and 1960, data include only civilian nurses actually employed at some time during the week preceding date of Census enumeration.

[2] Alaska and Hawaii are not included in United States or regional totals before 1960. Territories are not included in any totals. Adjustments of census data are explained in the text.

SOURCES: Tibbitts, Helen G., and Levine, Eugene. Health Manpower Source Book, Section 2—Nursing Personnel. Public Health Service Pub. No. 263. Washington, U.S. Government Printing Office, 1953, p. 16.

U.S. Department of Commerce, Bureau of the Census. U.S. Census of Population 1960. Detailed characteristics. State volumes. Washington, U.S. Government Printing Office, 1962 (adjusted).

Table 2.—Active[1] professional nurses per 100,000 population, by region and State: Census years 1910–60

Region and State	Active professional nurses per 100,000 population					
	1910	1920	1930	1940	1950	1960
United States[2]	55	98	175	216	249	293
Northeast	75	133	239	304	321	349
North Central	47	87	159	193	233	270
South	34	60	104	134	174	245
West	104	166	262	299	318	340
Alabama	24	44	69	84	132	208
Alaska	. . .	137	. . .	. . .	294	271
Arizona	95	121	216	259	293	324
Arkansas	17	26	63	81	98	184
California	138	212	347	373	350	366
Colorado	104	156	185	258	314	349
Connecticut	90	143	303	361	406	406
Delaware	68	61	138	222	309	348
District of Columbia	138	333	394	486	414	383
Florida	43	91	157	224	260	308
Georgia	39	60	97	111	146	211
Hawaii	. .	91	189	. . .	258	265
Idaho	69	113	127	146	218	275
Illinois	41	110	182	220	251	283
Indiana	40	64	116	151	196	251
Iowa	40	88	145	148	220	282
Kansas	50	68	120	143	219	303
Kentucky	29	51	72	104	130	193
Louisiana	30	51	90	134	173	200
Maine	67	122	201	231	301	331
Maryland	81	134	230	267	265	318
Massachusetts	91	156	311	405	417	408
Michigan	37	79	180	219	245	272
Minnesota	66	112	206	253	288	327
Mississippi	15	30	59	67	103	204
Missouri	48	78	135	166	198	243
Montana	82	124	168	199	260	320
Nebraska	49	85	147	149	205	275
Nevada	101	133	221	264	317	294
New Hampshire	40	126	245	307	378	443
New Jersey	71	102	208	274	285	320
New Mexico	59	83	114	143	186	262
New York	100	168	270	352	332	354
North Carolina	29	56	105	132	168	217
North Dakota	62	68	125	118	174	201
Ohio	54	83	168	203	237	260
Oklahoma	26	45	87	108	165	252
Oregon	100	139	225	263	286	318
Pennsylvania	40	95	175	209	262	317
Rhode Island	68	104	216	250	275	282
South Carolina	19	62	92	117	151	227
South Dakota	42	65	120	130	200	195
Tennessee	34	53	97	111	156	214
Texas	30	52	100	138	183	272
Utah	28	60	122	162	209	208
Vermont	81	140	205	245	364	369
Virginia	51	76	127	163	201	274
Washington	97	194	211	252	329	336
West Virginia	34	49	104	107	167	218
Wisconsin	53	90	144	197	231	260
Wyoming	49	50	145	189	233	275
American Samoa	. . .	. . .	. . .	. . .	. . .	470
Puerto Rico	. . .	28	60	. . .	73	98

[1] Defined in Table 1, footnote 1.

[2] See Table 1, footnote 2.

SOURCES: Tibbitts, Helen G., and Levine, Eugene. Health Manpower Source Book, Section 2—Nursing Personnel. Public Health Service Pub. No. 263. Washington, U.S. Government Printing Office, 1953, p. 17.

U.S. Department of Commerce, Bureau of the Census. Statistical Abstract of the United States. 1964 ed. Washington, U.S. Government Printing Office, 1964, p. 12.

Table 1.

Table 3.—Number of registered nurses—active and inactive—[1] by region and State: 1949, 1951, 1957, and 1962

Region and State	Active registered nurses				Inactive registered nurses			
	1949	1951	1957	1962	1949	1951	1957	1962
United States	299, 067	333, 268	464, 138	532, 118	205, 171	221, 576	231, 834	282, 819
Northeast	103, 206	114, 629	161, 679	174, 299	76, 930	81, 786	83, 873	107, 651
North Central	83, 847	94, 990	130, 042	148, 932	54, 864	61, 221	63, 444	71, 197
South	59, 422	67, 422	100, 055	115, 544	31, 890	36, 760	40, 722	49, 492
West	52, 592	56, 227	72, 362	93, 343	41, 487	41, 809	43, 795	54, 479
Alabama	2, 886	3, 201	4, 482	5, 047	1, 418	1, 419	1, 827	1, 873
Alaska	471	289	357	683	380	265	317	402
Arizona	1, 291	2, 295	3, 429	4, 896	873	1, 570	1, 508	2, 172
Arkansas	964	1, 596	2, 200	2, 194	456	698	867	993
California	32, 707	32, 020	37, 469	52, 151	25, 870	24, 193	25, 147	34, 175
Colorado	3, 210	3, 453	6, 071	6, 825	1, 900	1, 675	1, 875	2, 439
Connecticut	5, 569	7, 348	13, 762	11, 365	4, 868	5, 926	4, 719	8, 748
Delaware	967	951	1, 587	1, 775	794	960	1, 054	1, 178
District of Columbia	3, 328	3, 060	3, 734	4, 000	1, 172	1, 081	1, 789	783
Florida	4, 399	5, 670	11, 766	14, 109	2, 997	4, 121	5, 188	6, 039
Georgia	3, 522	4, 251	6, 360	7, 816	1, 898	2, 478	3, 012	3, 431
Hawaii	1, 095	1, 100	1, 893	1, 974	548	572	365	590
Idaho	1, 002	1, 305	1, 498	1, 913	962	1, 038	984	1, 207
Illinois	21, 542	21, 240	24, 024	28, 890	15, 996	15, 019	15, 581	18, 827
Indiana	5, 706	7, 181	10, 593	11, 223	5, 287	5, 322	4, 473	4, 746
Iowa	4, 022	5, 587	8, 034	8, 555	4, 120	5, 607	6, 115	6, 389
Kansas	3, 521	3, 584	5, 833	6, 208	2, 941	2, 779	3, 476	3, 639
Kentucky	2, 689	3, 722	4, 181	5, 317	1, 653	2, 123	2, 298	2, 747
Louisiana	3, 879	4, 500	6, 154	6, 594	1, 874	2, 114	1, 777	1, 965
Maine	2, 061	2, 354	3, 059	3, 462	1, 855	2, 134	2, 293	2, 186
Maryland	4, 580	3, 930	7, 538	7, 779	1, 884	2, 228	1, 898	4, 320
Massachusetts	14, 726	15, 786	16, 801	21, 928	12, 179	11, 633	10, 588	13, 276
Michigan	12, 047	14, 144	17, 572	20, 433	9, 385	11, 087	10, 230	12, 433
Minnesota	5, 789	7, 357	11, 906	13, 192	1, 929	3, 127	3, 128	4, 029
Mississippi	1, 538	1, 852	3, 135	3, 141	833	879	614	894
Missouri	5, 134	5, 688	8, 841	9, 151	3, 239	3, 564	2, 998	2, 809
Montana	1, 201	1, 575	2, 314	2, 412	1, 389	1, 821	1, 180	1, 272
Nebraska	1, 956	2, 543	4, 289	4, 587	1, 365	1, 769	2, 443	2, 734
Nevada	305	482	656	888	237	337	371	574
New Hampshire	1, 460	1, 744	2, 922	2, 947	1, 036	848	1, 336	1, 685
New Jersey	9, 235	13, 400	16, 771	21, 860	8, 937	10, 414	10, 011	14, 990
New Mexico	820	1, 166	1, 962	2, 080	517	671	922	979
New York	44, 163	43, 762	63, 996	67, 199	24, 087	23, 852	23, 867	34, 715
North Carolina	4, 855	6, 163	9, 392	10, 793	1, 735	2, 367	2, 338	3, 310
North Dakota	828	934	1, 890	2, 138	630	767	980	1, 002
Ohio	15, 951	17, 524	24, 137	29, 381	6, 530	8, 186	9, 080	10, 947
Oklahoma	2, 127	2, 570	3, 360	3, 948	1, 251	1, 585	1, 599	1, 890
Oregon	3, 478	3, 902	5, 360	6, 209	3, 157	3, 132	3, 180	2, 269
Pennsylvania	23, 252	26, 849	39, 645	40, 497	22, 028	24, 804	29, 050	29, 550
Rhode Island	1, 517	2, 149	3, 268	3, 381	903	1, 261	1, 315	1, 526
South Carolina	2, 133	2, 861	4, 342	5, 184	1, 078	1, 183	1, 517	1, 814
South Dakota	985	1, 124	1, 559	1, 896	701	830	745	858
Tennessee	3, 151	3, 754	5, 065	6, 324	1, 284	1, 598	1, 690	2, 277
Texas	11, 129	10, 558	14, 261	17, 222	7, 391	7, 519	8, 639	10, 020
Utah	1, 238	1, 315	1, 841	2, 222	1, 078	1, 155	1, 481	1, 517
Vermont	1, 223	1, 237	1, 455	1, 660	1, 037	914	694	975
Virginia	4, 521	5, 672	8, 239	9, 886	2, 810	3, 228	3, 770	4, 895
Washington	5, 233	6, 785	8, 528	10, 024	4, 144	4, 926	6, 094	6, 426
West Virginia	2, 754	3, 111	4, 259	4, 415	1, 362	1, 179	845	1, 063
Wisconsin	6, 366	8, 084	11, 364	13, 278	2, 741	3, 164	4, 195	2, 784
Wyoming	541	540	984	1, 066	432	454	371	457
Puerto Rico	1, 466	1, 465	. . .	. . .	346	308	. . .	. . .

[1] In addition to the active and inactive nurses in 1957 and 1962, there were 38,430 and 32,594 respectively who did not report activity status. See Table 5a.

SOURCES: American Nurses' Association. Inventory of Professional Registered Nurses, 1949. New York, The Association. Processed. p. 17.
Ibid., 1951, p. 6.
American Nurses' Association. Research and Statistics Unit. Report of 1956-58 Inventory of Professional Registered Nurses. New York, The Association, 1963. Processed. Fig. 1.
Marshall, Eleanor D., and Moses, Evelyn B. The Nation's Nurses. Inventory of Professional Registered Nurses, New York, American Nurses' Association, 1965, p. 23.

Table 4.—Registered nurse-population ratios, by region and State: 1949, 1951, 1957, and 1962[1]

Region and State	Active registered nurses per 100,000 population				Inactive registered nurses per 100,000 population			
	1949	1951	1957	1962	1949	1951	1957	1962
United States	200	216	271	286	137	144	135	152
Northeast	261	289	375	380	195	206	195	234
North Central	190	211	260	284	124	136	127	136
South	129	139	191	202	69	76	78	86
West	268	268	280	309	212	200	169	180
Alabama	96	104	144	152	47	46	59	56
Alaska	362	180	155	282	292	165	137	166
Arizona	181	292	305	329	122	200	134	146
Arkansas	52	83	127	119	25	36	50	54
California	316	288	263	306	250	218	176	201
Colorado	248	261	365	361	147	127	113	129
Connecticut	274	366	583	433	240	295	200	333
Delaware	306	286	373	380	251	288	247	252
District of Columbia	412	375	489	507	145	133	234	99
Florida	165	191	269	260	112	139	119	111
Georgia	106	120	169	191	57	70	80	84
Hawaii	214	214	324	285	107	111	63	85
Idaho	176	222	233	273	169	177	153	172
Illinois	248	243	248	286	184	171	161	186
Indiana	144	175	234	241	134	130	99	102
Iowa	156	213	296	308	160	214	225	230
Kansas	183	184	274	280	153	142	163	164
Kentucky	94	125	143	172	58	71	78	89
Louisiana	147	163	198	196	71	77	57	58
Maine	228	258	324	354	205	234	243	224
Maryland	197	161	262	241	81	91	66	134
Massachusetts	311	342	341	423	257	252	215	256
Michigan	190	217	232	254	148	170	135	155
Minnesota	197	244	364	381	66	104	96	116
Mississippi	74	84	150	139	40	40.	29	40
Missouri	132	141	211	212	83	88	72	65
Montana	211	265	347	346	244	307	177	182
Nebraska	150	193	308	317	105	134	175	189
Nevada	194	285	252	254	151	199	143	164
New Hampshire	274	330	511	474	194	160	234	271
New Jersey	189	269	292	344	183	209	174	236
New Mexico	127	163	232	209	80	94	109	98
New York	297	291	391	384	162	158	146	198
North Carolina	124	149	215	229	44	57	54	70
North Dakota	139	153	309	338	106	126	160	158
Ohio	200	220	257	293	82	103	96	109
Oklahoma	101	118	147	161	59	73	70	77
Oregon	243	249	313	344	221	200	186	126
Pennsylvania	224	258	362	356	212	238	265	260
Rhode Island	189	277	384	385	113	162	155	174
South Carolina	105	131	191	212	53	54	67	74
South Dakota	156	171	234	263	111	126	112	119
Tennessee	97	112	147	173	40	48	49	62
Texas	146	130	157	170	97	92	95	99
Utah	185	185	223	232	161	163	179	158
Vermont	331	329	387	429	281	243	185	252
Virginia	137	167	214	233	85	95	98	115
Washington	228	279	313	333	181	203	224	213
West Virginia	143	155	231	246	71	59	46	59
Wisconsin	188	235	300	330	81	92	111	69
Wyoming	195	185	313	321	156	155	118	138
Puerto Rico	66	66	—	—	16	14	—	—

[1] Ratios computed on estimated resident population as of July 1.

SOURCES: U.S. Department of Commerce, Bureau of the Census. Statistical Abstract of the United States. Washington, U.S. Government Printing Office. 1955 ed., p. 10; 1962 ed., p. 9; 1964 ed., p. 11.
Table 3.

Table 5a.—Registered professional nurses employed or resident in each State and region, by activity status: 1957 and 1962

Region and State	Total number of nurses		Actively employed in nursing		Not employed in nursing		Activity status not reported	
	1957	1962	1957	1962	1957	1962	1957	1962
United States	734, 402	847, 531	464, 138	532, 118	231, 834	282, 819	38, 430	32, 594
Northeast	255, 980	295, 793	161, 679	174, 299	83, 873	107, 651	10, 428	13, 843
North Central	198, 255	225, 315	130, 042	148, 932	63, 444	71, 197	4, 769	5, 186
South	144, 311	171, 560	100, 055	115, 544	40, 722	49, 492	3, 534	6, 524
West	135, 856	154, 863	72, 362	93, 343	43, 795	54, 479	19, 699	7, 041
Alabama	6, 379	7, 201	4, 482	5, 047	1, 827	1, 873	70	281
Alaska	687	1, 106	357	683	317	402	13	21
Arizona	4, 973	7, 195	3, 429	4, 896	1, 508	2, 172	36	127
Arkansas	3, 091	3, 229	2, 200	2, 194	867	993	24	42
California	80, 339	92, 265	37, 469	52, 151	25, 147	34, 175	17, 723	5, 939
Colorado	8, 074	9, 548	6, 071	6, 825	1, 875	2, 439	128	284
Connecticut	18, 572	20, 467	13, 762	11, 365	4, 719	8, 748	91	354
Delaware	2, 744	3, 054	1, 587	1, 775	1, 054	1, 178	103	101
District of Columbia	5, 944	4, 989	3, 734	4, 000	1, 789	783	421	206
Florida	17, 791	24, 003	11, 766	14, 109	5, 188	6, 039	837	3, 855
Georgia	9, 432	11, 428	6, 360	7, 816	3, 012	3, 431	60	181
Hawaii	2, 317	2, 600	1, 893	1, 974	365	590	59	36
Idaho	2, 671	3, 156	1, 498	1, 913	984	1, 207	189	36
Illinois	39, 895	48, 641	24, 024	28, 890	15, 581	18, 827	290	924
Indiana	15, 443	16, 551	10, 593	11, 223	4, 473	4, 746	377	582
Iowa	14, 186	15, 592	8, 034	8, 555	6, 115	6, 389	37	648
Kansas	9, 753	9, 982	5, 833	6, 208	3, 476	3, 639	444	135
Kentucky	6, 524	8, 178	4, 181	5, 317	2, 298	2, 747	45	114
Louisiana	8, 544	8, 690	6, 154	6, 594	1, 777	1, 965	613	131
Maine	5, 428	5, 967	3, 059	3, 462	2, 293	2, 186	76	319
Maryland	9, 506	12, 406	7, 538	7, 779	1, 898	4, 320	70	307
Massachusetts	31, 523	42, 854	16, 801	21, 928	10, 588	13, 276	4, 134	7, 650
Michigan	30, 840	34, 526	17, 572	20, 433	10, 230	12, 433	3, 038	1, 660
Minnesota	15, 080	17, 362	11, 906	13, 192	3, 128	4, 029	46	141
Mississippi	3, 791	4, 128	3, 135	3, 141	614	894	42	93
Missouri	12, 085	12, 497	8, 841	9, 151	2, 998	2, 809	246	537
Montana	3, 508	3, 723	2, 314	2, 412	1, 180	1, 272	14	39
Nebraska	6, 744	7, 389	4, 289	4, 587	2, 443	2, 734	12	68
Nevada	1, 364	1, 518	656	888	371	574	337	56
New Hampshire	4, 307	4, 832	2, 922	2, 947	1, 336	1, 685	49	200
New Jersey	27, 086	37, 323	16, 771	21, 860	10, 011	14, 990	304	473
New Mexico	2, 908	3, 139	1, 962	2, 080	922	979	24	80
New York	91, 960	103, 026	63, 996	67, 199	23, 867	34, 715	4, 097	1, 112
North Carolina	11, 810	14, 229	9, 392	10, 793	2, 338	3, 310	80	126
North Dakota	2, 896	3, 166	1, 890	2, 138	980	1, 002	26	26
Ohio	33, 432	40, 627	24, 137	29, 381	9, 080	10, 947	215	299
Oklahoma	5, 079	5, 927	3, 360	3, 948	1, 599	1, 890	120	89
Oregon	8, 619	8, 598	5, 360	6, 209	3, 180	2, 269	79	120
Pennsylvania	70, 319	73, 513	39, 645	40, 497	29, 050	29, 550	1, 624	3, 466
Rhode Island	4, 601	5, 062	3, 268	3, 381	1, 315	1, 526	18	155
South Carolina	5, 979	7, 093	4, 342	5, 184	1, 517	1, 814	120	95
South Dakota	2, 311	2, 842	1, 559	1, 896	745	858	7	88
Tennessee	7, 258	8, 836	5, 065	6, 324	1, 690	2, 277	503	235
Texas	23, 224	27, 658	14, 261	17, 222	8, 639	10, 020	324	416
Utah	3, 621	3, 785	1, 841	2, 222	1, 481	1, 517	299	46
Vermont	2, 184	2, 749	1, 455	1, 660	694	975	35	114
Virginia	12, 091	14, 976	8, 239	9, 886	3, 770	4, 895	82	195
Washington	15, 404	16, 687	8, 528	10, 024	6, 094	6, 426	782	237
West Virginia	5, 124	5, 535	4, 259	4, 415	845	1, 063	20	57
Wisconsin	15, 590	16, 140	11, 364	13, 278	4, 195	2, 784	31	78
Wyoming	1, 371	1, 543	984	1, 066	371	457	16	20

SOURCES: American Nurses' Association. Research and Statistics Unit. Report of 1956–58 Inventory of Professional Registered Nurses. New York, The Association, 1963. Processed. Fig. 1.

Marshall, Eleanor D., and Moses, Evelyn B. The Nation's Nurses. Inventory of Professional Registered Nurses. New York, American Nurses' Association, 1965. P. 23.

Table 5b.—Adjusted numbers of active registered professional nurses, by State of residence and by State of employment: 1962

Region and State	By State of residence [1]	By State of employment	
		Inventory adjustment [2]	Adjustment to national estimate Jan. 1, 1962 [3]
United States	553, 510	552, 894	550, 000
Northeast	188, 508	182, 784	181, 603
North Central	143, 951	152, 312	151, 840
South	121, 184	120, 120	119, 484
West	99, 867	97, 678	97, 073
Alabama	5, 272	5, 252	5, 224
Alaska	628	696	694
Arizona	5, 037	4, 984	4, 972
Arkansas	2, 192	2, 223	2, 219
California	57, 700	55, 739	55, 240
Colorado	7, 080	7, 034	7, 005
Connecticut	11, 871	11, 565	11, 537
Delaware	1, 823	1, 836	1, 828
District of Columbia	3, 633	4, 172	4, 148
Florida	17, 796	16, 809	16, 432
Georgia	7, 903	7, 942	7, 924
Hawaii	1, 970	2, 002	1, 998
Idaho	1, 981	1, 935	1, 932
Illinois	20, 254	29, 450	29, 371
Indiana	11, 839	11, 632	11, 575
Iowa	9, 457	8, 926	8, 874
Kansas	6, 509	6, 293	6, 281
Kentucky	5, 318	5, 392	5, 382
Louisiana	6, 745	6, 695	6, 681
Maine	3, 856	3, 658	3, 630
Maryland	7, 838	7, 976	7, 949
Massachusetts	29, 369	26, 693	26, 032
Michigan	22, 058	21, 465	21, 322
Minnesota	13, 346	13, 300	13, 285
Mississippi	3, 237	3, 213	3, 203
Missouri	9, 291	9, 562	9, 505
Montana	2, 449	2, 438	2, 433
Nebraska	4, 653	4, 630	4, 624
Nevada	952	922	917
New Hampshire	3, 207	3, 074	3, 056
New Jersey	23, 758	22, 141	22, 101
New Mexico	2, 136	2, 134	2, 126
New York	66, 492	67, 932	67, 830
North Carolina	10, 972	10, 889	10, 876
North Dakota	2, 139	2, 156	2, 153
Ohio	29, 088	29, 599	29, 569
Oklahoma	4, 020	4, 008	4, 000
Oregon	6, 363	6, 297	6, 285
Pennsylvania	45, 297	42, 501	42, 222
Rhode Island	2, 812	3, 488	3, 473
South Carolina	5, 357	5, 254	5, 244
South Dakota	1, 977	1, 957	1, 948
Tennessee	6, 478	6, 497	6, 473
Texas	17, 517	17, 485	17, 448
Utah	2, 255	2, 249	2, 245
Vermont	1, 846	1, 732	1, 722
Virginia	10, 637	10, 016	9, 998
Washington	10, 234	10, 168	10, 148
West Virginia	4, 446	4, 461	4, 455
Wisconsin	13, 340	13, 342	13, 333
Wyoming	1, 082	1, 080	1, 078

[1] Nurses not answering the question on activity status were presumed to be active. No other adjustment was made. Punchcards were not available for those individuals who gave no information for the Inventory.

[2] Nurses not responding to the question on activity status were distributed to active and inactive in the same proportion as those responding to the question. The total in Illinois was also adjusted for nonresponse to all questions on the Inventory.

[3] Adjustment for nonresponse to the question on activity status was reduced to conform to the Jan. 1 national estimate of the Interagency Conference on Nursing Statistics. Method is explained in the text.

SOURCES: Pennell, Maryland Y. and Baker, Kathryn I. Health Manpower Source Book 19. Location of Manpower in 8 Health Occupations, 1962. Public Health Service Pub. No. 263, sec. 19. Washington, U.S. Government Printing Office, 1965, p. 26.

Marshall, Eleanor D., and Moses, Evelyn B. The Nation's Nurses. Inventory of Professional Registered Nurses. New York, American Nurses' Association, 1965, p. 24.

Divisions of Public Health Methods, Dental Public Health and Resources, and Nursing. Health Manpower Source Book 18. Manpower in the 1960's. Public Health Service Pub. No. 263, Sec. 18. Washington, U.S. Government Printing Office, 1964, p. 56.

Table 6.—Professional nurses licensed for the first time, and proportion by examination, by region and State: selected years 1945–63

	Total new licenses issued [1]					Percent of new licenses by examination				
	1945	1950	1955	1960	1963	1945	1950	1955	1960	1963
United States	30, 239	25, 429	31, 948	32, 295	32, 714	99	97	96	93	93
Northeast	11, 163	9, 489	11, 069	11, 361	10, 033	99	97	97	98	94
North Central	9, 687	7, 910	12, 289	10, 812	11, 718	100	98	98	92	97
South	6, 575	5, 114	5, 365	6, 164	6, 448	99	99	99	99	98
West	2, 814	2, 916	3, 225	3, 958	4, 515	99	88	83	76	70
Alabama	241	243	232	254	298	100	100	100	100	99
Alaska	—	—	15	28	27	—	—	13	4	44
Arizona	56	123	34	108	163	91	94	76	81	100
Arkansas	119	177	117	157	175	98	99	100	100	100
California	1, 168	1, 293	1, 642	2, 086	2, 707	100	88	76	70	61
Colorado	363	202	232	262	137	100	90	94	98	89
Connecticut	658	586	691	725	801	100	100	100	100	100
Delaware	147	116	116	86	119	99	100	100	99	96
District of Columbia	275	185	146	251	271	99	100	100	100	99
Florida	205	104	276	425	285	90	91	100	97	81
Georgia	427	132	356	460	836	100	97	99	96	99
Hawaii	72	103	126	189	191	99	97	82	55	46
Idaho	23	169	98	61	92	100	98	99	92	92
Illinois	[2] 2, 191	1, 673	2, 860	1, 753	2, 585	100	97	96	91	95
Indiana	158	530	724	841	859	100	99	100	99	99
Iowa	796	467	614	792	724	100	99	100	100	99
Kansas	490	340	474	30	383	100	99	99	80	98
Kentucky	257	196	331	365	365	100	98	98	99	98
Louisiana	475	475	327	314	271	98	100	99	99	99
Maine	—	212	195	161	192	—	96	95	94	96
Maryland	586	401	113	547	568	100	96	100	98	100
Massachussetts	1, 805	1, 634	1, 715	1, 827	1, 555	100	99	100	99	99
Michigan	1, 082	1, 031	1, 182	1, 214	1, 139	100	100	100	98	97
Minnesota	1, 156	840	1, 134	1, 370	1, 185	98	94	96	76	95
Mississippi	174	182	149	113	110	100	99	100	100	100
Missouri	646	554	801	935	990	100	99	97	99	98
Montana	171	154	181	212	150	100	100	96	95	95
Nebraska	230	263	348	318	404	100	98	100	99	100
Nevada	6	7	5	15	16	50	43	20	27	63
New Hampshire	—	127	194	175	144	—	93	95	94	92
New Jersey	1, 234	801	1, 036	1, 177	1, 473	99	98	92	92	93
New Mexico	12	25	22	74	56	100	84	82	80	82
New York	3, 287	2, 669	3, 336	3, 812	4, 351	99	98	93	91	89
North Carolina	694	665	617	636	572	100	100	99	100	98
North Dakota	229	212	259	221	210	99	97	98	97	99
Ohio	1, 862	1, 271	2, 916	2, 021	2, 202	100	100	100	98	98
Oklahoma	237	185	236	251	216	100	99	99	98	98
Oregon	218	204	270	311	276	96	79	87	90	91
Pennsylvania	3, 977	3, 228	3, 599	3, 456	1, 149	100	96	100	100	100
Rhode Island	71	163	195	225	272	100	100	99	100	100
South Carolina	339	236	305	331	346	100	100	98	99	99
South Dakota	194	164	241	237	246	100	96	100	100	98
Tennessee	426	388	544	493	459	99	98	98	99	99
Texas	987	625	590	618	688	100	100	100	100	98
Utah	166	109	164	135	175	100	96	99	97	94
Vermont	131	69	108	73	96	98	97	99	92	83
Virginia	570	483	568	568	638	100	97	99	98	99
Washington	545	525	429	449	505	100	79	87	80	86
West Virginia	416	321	342	295	231	100	99	100	99	100
Wisconsin	653	565	736	810	791	100	100	100	99	99
Wyoming	14	2	7	28	20	86	50	100	79	95
Guam	. . .	. . .	. . .	. . .	60	—	—	—	—	60
Puerto Rico	. . .	206	134	230	. . .	—	100	100	100	—
Virgin Islands	. . .	. . .	1	. . .	6	—	—	—	—	83

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[1] Licenses issued on basis of: examination, a license or certificate from a foreign country, or waiver.

[2] Also includes renewals by examination.

SOURCE: American Nurses' Association. Facts About Nursing: A Statistical Summary. New York, The Association. Annual ed., 1946, p. 17; 1951, p. 37; 1957, p. 44; 1962–63, p. 64; and 1965, p. 56.

Table 7.—Licenses issued for the first time in the United States to professional nurses on basis of a license or certificate issued by foreign country: 1950–63

Year	Number of licenses	Year	Number of licenses
1950	661	1957	1, 690
1951	601	1958	1, 761
1952	845	1959	1, 810
1953	987	1960	1, 854
1954	1, 067	1961	1, 794
1955	1, 128	1962	2, 303
1956	1, 217	1963	2, 421

SOURCE: American Nurses' Association. Facts About Nursing: A Statistical Summary, New York, The Association. Annual eds.: 1951, p. 37; 1952, p. 42; 1953, p. 38; 1954, p. 43; 1955–56, p. 55; 1957, p. 44; 1958, p. 47; 1959, p. 49; 1960, p. 48; 1961, p. 57; 1962–63, pp. 64 and 65; 1964, p. 66; and 1965, p. 56.

PART II

CHARACTERISTICS OF PROFESSIONAL NURSES

The tables in this part are based on the four inventories compiled by the American Nurses' Association except for the percentages computed from Census Bureau data on married professional nurses (table 11).

Census information shows that the proportion of males among professional nurses and students dropped from 6 percent in 1900 to 2 percent in 1950.[1] The 1960 Census reported that 2.5 percent of professional nurses were male.[2] The inventory figures, however, show consistently that less than 1 percent of the total active registered professional nurses were men. Therefore, it is believed that the census figures are high. It is possible that some male attendants, especially in hospitals, consider themselves nurses even though they are neither trained as professional nurses nor required to be licensed.

The proportion of employed female nurses who were nonwhite was 6.5 percent in the 1960 census [3] contrasted with only 3.5 percent in 1950 [4] and less than 2 percent in 1930 and 1940. These figures, of course, are subject to the same limitations described in part I for the general distribution of professional nurses. A question regarding race was added to the 1951 inventory questionnaire for 31 States; the remaining States indicated they did not want the question on race included. The nonresponse rate for this question where it was asked was so great that no meaningful estimates on numbers of Negro nurses registered could be made.[5]

Since 1920, Census Bureau statistics on age distributions have shown a rising age level for professional nurses reported. In 1920, 16 percent were 45 years or over; in 1960 the proportion was 40 percent of the adjusted totals.[6] [7] This trend is in line with the inventory data: 22.6 percent of active registered professional nurses were 45 years or over in 1949; 36.1 percent in 1962. The inactives followed the same pattern, but in each inventory, the percentage of active nurses who were 45 or over was consistently higher than the proportion of inactive nurses in this age group (table 8). Median ages computed from the grouped age data of the inventories increased by 6 years for active nurses and by 4 years for inactive nurses in the total United States. Each region also shows a continual increase in median age, though slight variations in this trend exist among the States (table 9).

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[1] Tibbitts, Helen G., and Levine, Eugene. Health Manpower Source Book, Section 2—Nursing Personnel. Public Health Service Publication No. 263. Washington, U.S. Government Printing Office, 1953, p. 23.

[2] U.S. Department of Commerce, Bureau of the Census. U.S. Census of Population 1960. Detailed characteristics. Series PC(1)–1D. U.S. Summary. Washington, U.S. Government Printing Office, 1962, table 202.

[3] Ibid., table 205.

[4] American Nurses' Association. Facts About Nursing, 1957 ed., New York, The Association, p. 13.

[5] American Nurses' Association. Inventory of Professional Registered Nurses, 1951. New York, The Association. Processed. p. 4.

Concurrent with the rising age level has been the increasing proportion of married nurses in the active group. This rate rose from 11 percent, computed from census data for 1920, to 61 percent computed from the 1962 inventory (table 11). The proportion of married inactive nurses has been high in each inventory report—more than four out of every five inactive nurses—although the proportion married appears to have decreased slightly over the inventory time periods. However, the large numbers for whom marital status was unknown may be responsible for some distortion of the data (table 12).

Tables 13 and 14 contain detailed data for each State on the numbers of active registered professional nurses by field of practice and by position in 1949, 1951, 1957, and 1962. Again, any comparisons made among the various inventories must be considered within the limitations of the data discussed in part I.

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[6] U.S. Department of Commerce, Bureau of the Census. 1920 Census of Population, vol. IV. Occupations. Washington, U.S. Government Printing Office, 1923.

[7] Ibid., 1960 Census. Detailed characteristics. Table 204, adjusted.

TABLES IN PART II

Characteristics of Professional Nurses

Table 8. Age distribution of active and inactive registered professional nurses in the United States: 1949, 1951, 1957, and 1962

Table 9. Median age of active and inactive registered professional nurses, by region and State: 1949, 1951, 1957, and 1962

Table 10. Percentage distribution of registered professional nurses by marital status and activity status, United States total: 1949, 1951, 1957, and 1962

Table 11. Estimated percent of married nurses among female professional nurses and registered nurses in practice, by region and State: selected years 1960–62

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Table 13a. Active registered professional nurses by field of practice, by region and State: 1949

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Table 14a. Active registered professional nurses by type of position, by region and State: 1949

Table 14b. Active registered professional nurses by type of position, by region and State: 1951

Table 14c. Active registered professional nurses by type of position, by region and State: 1957

Table 14d. Active registered professional nurses by type of position, by region and State: 1962

Table 8.—Age distribution of active and inactive registered professional nurses[1] in the United States: 1949, 1951, 1957, and 1962

Age	Active				Inactive			
	1949	1951	1957	1962	1949	1951	1957	1962
	Number							
Total	299, 067	333, 268	464, 138	532, 118	205, 171	221, 576	231, 834	282, 819
Under 30	117, 478	119, 704	137, 239	131, 901	67, 960	68, 923	49, 169	56, 680
30–39	76, 668	83, 878	114, 311	130, 692	78, 615	80, 851	86, 482	98, 577
40–44	33, 607	40, 006	48, 462	61, 845	22, 835	26, 524	25, 568	33, 972
45–49	23, 517	27, 124	49, 080	60, 102	11, 619	13, 896	22, 413	23, 962
50–59	33, 086	36, 272	62, 062	94, 018	14, 265	15, 901	22, 685	34, 062
60 or over	10, 752	13, 806	30, 548	37, 666	7, 471	9, 220	15, 199	24, 875
Unknown age	3, 959	12, 478	22, 436	15, 894	2, 406	6, 261	10, 318	10, 691
	Percent							
Total	100. 0	100. 0	100. 0	100. 0	100. 0	100. 0	100. 0	100. 0
Under 30	39. 3	36. 0	29. 6	24. 8	33. 1	31. 1	21. 2	20. 0
30–39	25. 7	25. 2	24. 6	24. 5	38. 3	36. 5	37. 3	34. 9
40–44	11. 2	12. 0	10. 4	11. 6	11. 1	12. 0	11. 0	12. 0
45–49	7. 9	8. 1	10. 6	11. 3	5. 7	6. 3	9. 7	8. 5
50–59	11. 0	10. 9	13. 4	17. 7	7. 0	7. 2	9. 8	12. 0
60 or over	3. 6	4. 1	6. 6	7. 1	3. 6	4. 1	6. 6	8. 8
Unknown age	1. 3	3. 7	4. 8	3. 0	1. 2	2. 8	4. 4	3. 8

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[1] In addition to the active and inactive nurses in 1957 and 1962, there were 38,430 and 32,594 respectively who did not report activity status. See Table 5a.

SOURCES: American Nurses' Association Inventory of Professional Registered Nurses, 1949. New York, The Association. Processed. pp. 26 and 27. Ibid., 1951, pp. 10 and 11.

American Nurses' Association. Research and Statistics Unit. Report of 1956-1958 Inventory of Professional Registered Nurses. New York, The Association, 1963. Processed. Tables 8 and 9.

Marshall, Eleanor D., and Moses, Evelyn B. The Nation's Nurses. Inventory of Professional Registered Nurses. New York, American Nurses' Association, 1965, pp. 27 and 28.

Table 9.—Median age of active and inactive registered professional nurses, by region and State: 1949, 1951, 1957, and 1962

Region and State	Active registered nurses				Inactive registered nurses			
	1949	1951	1957	1962	1949	1951	1957	1962
United States	33.4	34.3	36.8	39.2	33.8	34.3	36.6	37.5
Northeast	34.6	34.7	35.7	38.8	34.0	34.4	36.1	36.9
North Central	31.7	33.3	36.2	39.2	32.8	33.5	35.9	37.3
South	31.9	33.5	37.4	38.9	32.7	33.7	36.7	37.4
West	35.3	36.4	39.2	40.1	34.9	35.7	38.6	39.4
Alabama	32.6	34.4	37.5	39.7	32.8	33.8	37.1	37.6
Alaska	34.7	34.2	37.8	37.2	33.5	33.5	37.5	37.0
Arizona	35.6	36.6	39.1	41.0	35.4	36.6	38.7	39.9
Arkansas	32.7	33.2	36.5	37.0	32.8	34.2	36.4	37.0
California	36.7	37.6	40.6	40.3	36.3	36.8	39.6	40.2
Colorado	32.0	32.6	35.8	36.9	32.0	33.3	36.7	36.9
Connecticut	34.5	34.3	35.8	39.2	35.5	35.4	37.1	37.9
Delaware	29.9	30.6	32.5	37.3	33.0	33.2	3[illegible].8	36.6
District of Columbia	32.9	34.6	41.0	41.6	33.6	35.1	3[illegible].6	41.8
Florida	34.1	36.5	40.2	41.3	35.1	36.6	38.9	40.7
Georgia	33.0	35.4	37.9	38.4	33.4	34.3	38.1	38.0
Hawaii	30.7	31.6	32.2	33.9	34.2	34.7	35.7	34.1
Idaho	32.0	34.7	37.8	39.1	33.1	33.8	36.6	37.8
Illinois	33.0	33.8	37.7	42.5	32.8	33.8	36.5	38.8
Indiana	30.1	32.4	35.8	38.4	32.9	33.4	36.2	36.8
Iowa	31.2	33.0	36.3	37.9	33.0	33.9	37.7	37.2
Kansas	31.4	33.6	35.3	37.2	32.8	32.5	35.4	36.4
Kentucky	30.7	32.6	37.3	38.3	33.1	34.1	37.3	38.1
Louisiana	30.2	32.2	36.4	38.2	30.3	32.3	35.1	35.8
Maine	33.5	36.3	43.7	42.2	34.5	35.7	40.9	39.8
Maryland	31.6	32.6	36.2	38.1	32.1	32.4	36.1	34.6
Massachusetts	35.2	34.5	32.6	37.2	34.7	35.0	34.0	35.9
Michigan	31.8	34.1	35.5	39.1	33.7	34.5	35.5	37.9
Minnesota	29.8	30.4	33.9	36.6	30.4	30.7	34.7	34.3
Mississippi	33.6	34.0	35.7	39.7	33.0	33.6	37.5	37.5
Missouri	33.1	35.2	38.2	37.1	34.1	33.6	37.0	36.5
Montana	30.8	33.3	36.1	38.8	31.5	32.2	35.4	36.1
Nebraska	30.7	33.2	34.0	36.8	31.5	32.4	36.4	37.2
Nevada	34.9	37.6	38.4	42.4	36.2	36.4	39.3	40.4
New Hampshire	34.4	36.1	38.5	41.3	33.6	34.4	36.5	37.3
New Jersey	33.8	32.8	36.8	39.4	33.3	33.5	36.0	36.3
New Mexico	34.9	35.2	38.8	40.2	32.4	33.4	35.8	37.4
New York	35.6	36.4	35.8	39.6	34.1	34.4	37.0	37.9
North Carolina	30.1	31.0	33.3	37.0	30.6	31.9	34.1	35.4
North Dakota	28.4	29.0	31.0	34.8	28.3	29.3	32.5	34.1
Ohio	31.1	32.6	36.6	39.7	33.0	33.9	34.4	36.4
Oklahoma	32.1	33.8	40.8	39.4	32.5	32.7	35.9	37.2
Oregon	35.4	36.4	41.0	41.8	35.1	36.0	39.7	40.1
Pennsylvania	33.1	33.0	35.6	37.3	33.5	34.2	35.9	36.1
Rhode Island	32.6	34.6	36.8	38.1	33.4	33.7	35.1	35.9
South Carolina	32.2	32.8	35.2	37.3	33.5	32.7	34.3	35.5
South Dakota	29.2	30.1	35.8	35.5	29.9	30.7	34.6	35.1
Tennessee	31.2	33.7	39.5	38.2	31.8	33.1	37.0	36.1
Texas	32.0	34.1	38.2	40.3	32.9	34.1	37.0	39.1
Utah	30.4	33.0	34.4	37.3	32.4	33.4	36.6	38.4
Vermont	33.9	34.4	39.9	42.6	33.0	34.7	36.0	38.3
Virginia	32.5	33.4	36.8	38.4	32.4	33.3	35.9	36.7
Washington	32.7	35.4	39.7	41.6	33.4	34.2	37.2	38.8
West Virginia	30.7	31.1	36.0	37.9	31.3	30.5	35.2	34.9
Wisconsin	32.6	34.6	36.2	37.3	30.7	32.4	35.6	36.3
Wyoming	29.9	33.4	37.1	39.1	32.2	32.6	35.9	36.6
Puerto Rico	31.1	30.6	...	...	32.4	32.9	...	...

SOURCE: Computed from grouped data in references listed on Table 8.

Table 10.—Percentage distribution of registered professional nurses by marital status and activity status, United States total: 1949, 1951, 1957, and 1962 [1]

Year	Total		Single		Married		Widowed, Divorced, Separated		Unknown	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Active:										
1949	299, 067	100. 0	138, 503	46. 4	125, 441	41. 9	30, 926	10. 3	4, 197	1. 4
1951	333, 268	100. 0	128, 959	38. 7	155, 041	46. 5	32, 174	9. 7	17, 094	5. 1
1957	464, 138	100. 0	145, 966	31. 4	256, 100	55. 2	45, 419	9. 8	16, 653	3. 6
1962 [2]	532, 118	100. 0	131, 768	25. 6	313, 993	61. 0	56, 790	11. 0	12, 345	2. 4
Inactive:										
1949	205, 171	100. 0	17, 070	8. 3	178, 345	87. 0	7, 032	3. 4	2, 724	1. 3
1951	221, 576	100. 0	15, 049	6. 8	190, 342	85. 9	7, 517	3. 4	8, 668	3. 9
1957	231, 834	100. 0	13, 756	5. 9	199, 810	86. 2	10, 595	4. 6	7, 673	3. 3
1962 [2]	282, 819	100. 0	14, 509	5. 3	231, 119	84. 7	13, 040	4. 8	14, 131	5. 2

[1] In addition to the active and inactive nurses in 1957 and 1962, there were 38,430 and 32,594 respectively who did not report activity status. See Table 5a.
[2] Texas included in total only.

SOURCES: American Nurses' Association. Inventory of Professional Registered Nurses, 1949. New York, The Association. Processed. pp. 28 and 29.
Ibid., 1951, pp. 12 and 13.
American Nurses' Association. Research and Statistics Unit. Report of 1956-58 Inventory of Professional Registered Nurses. New York, The Association, 1963. Processed. Tables 10 and 11.
Marshall, Eleanor D., and Moses, Evelyn B. The Nation's Nurses. Inventory of Professional Registered Nurses. New York, The American Nurses' Association, 1965, pp. 25 and 26.

Table 11.—Estimated percent of married nurses among female professional nurses and registered nurses in practice, by region and State: selected years 1920–62

Region and State	Professional nurses [1]			Registered professional nurses			
	1920	1930	1940	1949	1951	1957	1962
United States	11	17	[2] 25	42	46	55	61
Northeast	9	14	22	39	44	52	58
North Central	10	16	24	41	46	54	63
South	12	19	29	45	49	59	62
West	16	26	34	45	49	58	61
Alabama	12	18	32	51	55	63	62
Alaska	. . .	. . .	. . .	37	39	54	59
Arizona	14	31	35	46	52	60	64
Arkansas	20	21	29	45	47	58	64
California	17	26	34	44	47	55	57
Colorado	15	25	32	41	45	53	61
Connecticut	11	14	22	43	47	61	66
Delaware	16	20	26	45	48	59	68
District of Columbia	11	25	28	38	42	48	49
Florida	23	27	33	45	50	60	62
Georgia	18	21	30	44	50	61	64
Hawaii	. . .	. . .	. . .	33	39	54	61
Idaho	14	28	36	54	59	71	74
Illinois	10	15	21	40	45	54	63
Indiana	9	17	28	47	53	62	69
Iowa	10	14	25	45	49	63	63
Kansas	10	16	21	44	49	61	66
Kentucky	11	15	27	41	48	57	62
Louisiana	15	19	27	43	47	58	62
Maine	16	21	27	44	51	58	66
Maryland	7	13	23	34	38	52	62
Massachusetts	10	13	16	38	42	52	55
Michigan	12	21	30	45	50	38	64
Minnesota	8	11	18	34	41	52	62
Mississippi	12	20	29	52	51	67	63
Missouri	10	15	22	39	42	52	57
Montana	17	19	26	46	55	64	71
Nebraska	11	15	26	43	44	57	67
Nevada	23	30	40	52	56	59	68
New Hampshire	9	18	24	47	54	62	67
New Jersey	9	16	23	42	48	57	65
New Mexico	11	21	29	46	52	61	57
New York	10	15	25	37	42	47	51
North Carolina	10	16	30	45	51	65	69
North Dakota	9	10	17	33	38	55	67
Ohio	10	16	26	41	45	60	62
Oklahoma	14	20	31	50	50	55	62
Oregon	21	27	34	48	52	63	68
Pennsylvania	7	11	18	40	45	55	62
Rhode Island	9	13	16	38	46	57	61
South Carolina	10	16	26	49	53	63	67
South Dakota	13	16	21	39	40	55	66
Tennessee	11	19	30	46	50	55	62
Texas	12	23	31	49	52	61	. . .
Utah	16	29	37	55	62	65	67
Vermont	9	18	24	43	47	59	63
Virginia	11	18	31	43	48	59	68
Washington	12	24	30	48	55	65	67
West Virginia	8	16	31	47	50	60	65
Wisconsin	5	11	20	38	46	54	66
Wyoming	33	33	35	48	57	67	73
Puerto Rico	. . .	. . .	. . .	45	41	. . .	. . .

[1] Includes married with husband absent. [2] Includes 4 percent married with husband absent.

SOURCES: Tibbitts, Helen G., and Levine, Eugene. Health Manpower Source Book, Section 2—Nursing Personnel. Public Health Service Pub. No. 263. Washington, U.S. Government Printing Office, 1953, p. 27.

American Nurses' Association. Inventory of Professional Registered Nurses, 1949. New York, The Association. Processed. p. 28.

Ibid., 1951, p. 12.

American Nurses' Association. Research and Statistics Unit. Report of 1956–58 Inventory of Professional Registered Nurses. New York, The Association, 1963. Processed. Table 10.

Marshall, Eleanor D., and Moses, Evelyn B. The Nation's Nurses. Inventory of Professional Registered Nurses. New York, The American Nurses' Association, 1965, p. 25.

Table 12.—Percent of married nurses among inactive registered nurses, by region and State: 1949, 1951, 1957, and 1962

Region and State	1949	1951	1957	1962
United States	87	86	86	85
Northeast	86	86	86	86
North Central	87	86	85	85
South	87	86	87	84
West	87	85	87	83
Alabama	88	84	87	79
Alaska	86	94	90	89
Arizona	86	81	86	83
Arkansas	86	88	87	81
California	85	83	86	82
Colorado	83	85	86	84
Connecticut	88	86	88	86
Delaware	92	90	92	92
District of Columbia	72	73	77	70
Florida	85	82	83	81
Georgia	87	87	89	88
Hawaii	89	85	83	87
Idaho	93	90	92	90
Illinois	88	87	90	87
Indiana	91	89	91	89
Iowa	89	87	91	85
Kansas	89	89	85	82
Kentucky	89	86	88	86
Louisiana	90	86	83	79
Maine	87	85	86	84
Maryland	87	88	91	90
Massachusetts	85	84	87	82
Michigan	89	86	68	76
Minnesota	78	81	88	88
Mississippi	85	85	85	79
Missouri	86	84	83	82
Montana	92	89	92	89
Nebraska	87	82	90	89
Nevada	91	88	86	87
New Hampshire	85	84	88	87
New Jersey	89	89	89	87
New Mexico	88	88	91	71
New York	84	85	78	82
North Carolina	84	82	89	88
North Dakota	87	86	89	89
Ohio	84	86	86	90
Oklahoma	88	87	91	75
Oregon	87	85	89	75
Pennsylvania	88	88	90	90
Rhode Island	89	87	89	86
South Carolina	86	86	90	85
South Dakota	87	87	87	88
Tennessee	83	84	77	81
Texas	91	89	91	. . .
Utah	94	91	92	88
Vermont	86	86	89	85
Virginia	89	88	87	89
Washington	90	88	90	88
West Virginia	89	88	90	84
Wisconsin	84	83	88	86
Wyoming	94	92	90	89
Puerto Rico	73	76	. . .	. . .

SOURCES: American Nurses' Association. Inventory of Professional Registered Nurses, 1949. New York, The Association. Processed. p. 29.
Ibid., 1951, p. 13.

American Nurses' Association. Research and Statistics Unit. Report of 1956–58 Inventory of Professional Registered Nurses. New York, The Association, 1963. Processed. Table 11.

Marshall, Eleanor D., and Moses, Evelyn B. The Nation's Nurses. Inventory of Professional Registered Nurses. New Yo[illegible] American Nurses' Association, 1965, p. 26.

Table 13a.—Active registered professional nurses by field of practice, by region and State: 1949

Region and State	Total	Hospital	Public health [1]	Occupational health	Nursing education	Private duty	Office	Other	Unclassified
United States	299, 067	141, 266	28, 487	13, 056	12, 036	64, 915	26, 381	1, 368	11, 558
Northeast	103, 206	46, 580	11, 254	4, 763	3, 992	26, 551	5, 896	474	3, 696
North Central	83, 847	41, 543	6, 933	4, 870	3, 880	15, 338	7, 435	340	3, 508
South	59, 422	27, 281	5, 688	1, 965	2, 489	13, 846	5, 776	320	2, 057
West	52, 592	25, 862	4, 612	1, 458	1, 675	9, 180	7, 274	234	2, 297
Alabama	2, 886	1, 374	283	147	104	473	297	20	188
Alaska	471	256	92	18	—	45	40	2	18
Arizona	1, 291	562	121	35	37	325	156	17	38
Arkansas	964	470	112	14	30	192	98	4	44
California	32, 707	15, 601	3, 009	981	851	5, 822	4, 808	131	1, 504
Colorado	3, 210	1, 730	244	61	157	584	286	19	129
Connecticut	5, 569	2, 651	607	290	211	1, 370	328	17	95
Delaware	967	409	113	62	44	229	96	3	11
District of Columbia	3, 328	1, 697	396	106	97	656	263	37	76
Florida	4, 399	1, 807	330	80	107	1, 368	548	18	141
Georgia	3, 522	1, 578	511	144	120	768	278	28	95
Hawaii	1, 095	635	131	59	30	110	91	3	36
Idaho	1, 002	481	89	8	58	159	179	3	25
Illinois	21, 542	10, 362	1, 680	1, 400	1, 034	4, 351	1, 939	65	711
Indiana	5, 706	2, 511	485	405	211	1, 204	708	11	171
Iowa	4, 022	1, 935	257	80	206	816	475	20	233
Kansas	3, 521	1, 743	239	67	197	697	384	21	173
Kentucky	2, 689	1, 396	315	78	83	527	196	16	78
Louisiana	3, 879	1, 877	322	97	163	877	333	16	194
Maine	2, 061	882	177	56	72	672	130	6	66
Maryland	4, 580	2, 304	572	110	275	1, 017	156	18	128
Massachusetts	14, 726	6, 730	1, 561	663	677	3, 829	751	44	471
Michigan	12, 047	6, 299	1, 009	859	439	1, 524	1, 314	63	540
Minnesota	5, 789	3, 207	480	116	319	990	347	35	295
Mississippi	1, 538	701	198	26	59	332	155	5	62
Missouri	5, 134	2, 423	467	241	221	1, 124	406	26	226
Montana	1, 201	635	75	10	84	223	132	8	34
Nebraska	1, 956	964	139	39	112	371	215	12	104
Nevada	305	157	18	5	—	74	40	1	10
New Hampshire	1, 460	642	121	45	61	434	80	2	75
New Jersey	9, 235	3, 639	1, 358	554	387	2, 235	720	37	305
New Mexico	820	410	130	10	13	144	95	3	15
New York	44, 163	21, 242	4, 593	1, 811	1, 501	10, 732	2, 208	221	1, 855
North Carolina	4, 855	2, 360	418	102	267	1, 087	481	19	121
North Dakota	828	447	63	—	67	121	73	7	50
Ohio	15, 951	7, 704	1, 468	1, 244	768	3, 110	1, 036	47	574
Oklahoma	2, 127	906	194	47	89	500	289	13	89
Oregon	3, 478	1, 617	191	73	133	706	536	17	205
Pennsylvania	23, 252	9, 440	2, 534	1, 256	976	6, 627	1, 535	140	744
Rhode Island	1, 517	816	188	68	57	250	94	3	41
South Carolina	2, 133	868	220	102	66	561	245	11	60
South Dakota	985	536	60	5	65	151	118	1	49
Tennessee	3, 151	1, 503	340	183	155	570	280	10	110
Texas	11, 129	4, 852	746	311	467	2, 827	1, 436	78	412
Utah	1, 238	656	134	37	92	129	134	3	53
Vermont	1, 223	538	115	20	50	402	50	4	44
Virginia	4, 521	2, 053	420	163	217	1, 184	339	18	127
Washington	5, 233	2, 805	340	152	219	785	717	26	189
West Virginia	2, 754	1, 126	198	193	146	678	286	6	121
Wisconsin	6, 366	3, 412	586	414	241	879	420	32	382
Wyoming	541	317	38	9	1	74	60	1	41
Puerto Rico	1, 466	616	443	57	119	117	63	3	48

[1] Includes school nurse.

SOURCE: American Nurses' Association. Inventory of Professional Registered Nurses, 1949. New York, The Association. Processed. p. 19.

Table 13b.—Active registered professional nurses by field of practice, by region and State: 1951

Region and State	Total	Hospital	Public health [1]	Occupational health	Nursing education	Private duty	Office	Other	Unclassified
United States	333, 268	162, 211	29, 372	14, 234	12, 143	69, 780	28, 163	1, 787	15, 578
Northeast	114, 629	54, 307	11, 556	5, 232	3, 900	28, 373	6, 248	472	4, 541
North Central	94, 990	48, 410	7, 174	5, 322	4, 174	16, 914	8, 019	455	4, 522
South	67, 422	31, 055	6, 142	2, 131	2, 406	15, 331	6, 324	558	3, 475
West	56, 227	28, 439	4, 500	1, 549	1, 663	9, 162	7, 572	302	3, 040
Alabama	3, 201	1, 511	272	157	99	567	323	32	240
Alaska	289	176	49	5	2	16	25	6	10
Arizona	2, 295	1, 051	211	57	39	477	301	23	136
Arkansas	1, 596	805	147	22	38	287	188	13	96
California	32, 020	15, 786	2, 722	1, 025	768	5, 219	4, 579	160	1, 761
Colorado	3, 453	1, 899	238	55	166	642	294	28	131
Connecticut	7, 348	3, 615	728	389	249	1, 683	456	22	206
Delaware	951	416	110	52	50	195	97	5	26
District of Columbia	3, 060	1, 545	273	71	101	541	220	155	154
Florida	5, 670	2, 313	414	96	124	1, 832	664	23	204
Georgia	4, 251	1, 824	553	183	123	986	353	34	195
Hawaii	1, 100	681	112	50	28	99	98	2	30
Idaho	1, 305	596	119	22	76	217	222	5	48
Illinois	21, 240	10, 408	1, 466	1, 338	913	4, 312	1, 784	85	934
Indiana	7, 181	3, 231	553	531	230	1, 530	876	22	208
Iowa	5, 587	2, 939	335	101	241	983	631	22	335
Kansas	3, 584	1, 785	236	86	205	710	387	14	161
Kentucky	3, 722	2, 077	350	112	119	640	276	22	126
Louisiana	4, 500	2, 322	256	107	157	1, 039	402	25	192
Maine	2, 354	1, 008	186	66	85	767	141	9	92
Maryland	3, 930	2, 036	452	90	236	829	153	24	110
Massachusetts	15, 786	8, 086	1, 478	625	644	3, 556	712	65	620
Michigan	14, 144	7, 383	1, 089	1, 061	495	1, 782	1, 372	71	891
Minnesota	7, 357	4, 267	500	155	389	1, 207	441	37	361
Mississippi	1, 852	776	243	35	65	368	191	9	165
Missouri	5, 688	2, 810	523	284	307	1, 047	387	51	279
Montana	1, 575	800	93	13	101	332	170	6	60
Nebraska	2, 543	1, 322	147	44	139	525	263	9	94
Nevada	482	257	28	8	—	100	56	—	33
New Hampshire	1, 744	762	167	45	65	539	91	2	73
New Jersey	13, 400	5, 695	1, 688	737	402	3, 364	938	40	536
New Mexico	1, 166	566	146	23	14	225	124	10	58
New York	43, 762	21, 399	4, 201	1, 838	1, 401	10, 678	2, 057	219	1, 969
North Carolina	6, 163	2, 792	542	129	259	1, 436	604	25	376
North Dakota	934	534	51	1	54	148	78	7	61
Ohio	17, 524	8, 517	1, 612	1, 227	858	3, 382	1, 192	105	631
Oklahoma	2, 570	1, 154	254	59	98	524	350	10	121
Oregon	3, 902	1, 904	203	94	160	671	577	16	277
Pennsylvania	26, 849	12, 001	2, 765	1, 396	915	7, 061	1, 691	107	913
Rhode Island	2, 149	1, 193	243	118	77	325	116	6	71
South Carolina	2, 861	1, 176	272	120	106	715	335	14	123
South Dakota	1, 124	671	47	9	68	156	107	8	58
Tennessee	3, 754	1, 746	417	195	154	694	304	45	199
Texas	10, 558	4, 846	866	306	317	2, 439	1, 161	74	549
Utah	1, 315	701	156	42	71	134	134	7	70
Vermont	1, 237	548	100	18	62	400	46	2	61
Virginia	5, 672	2, 400	525	198	233	1, 480	429	26	381
Washington	6, 785	3, 711	394	149	237	943	930	34	387
West Virginia	3, 111	1, 316	196	199	127	759	274	22	218
Wisconsin	8, 084	4, 543	615	485	275	1, 132	501	24	509
Wyoming	540	311	29	6	1	87	62	5	39
Puerto Rico	1, 465	815	278	89	83	103	28	7	62

[1] Includes school nurse.

SOURCE: American Nurses' Association. Inventory of Professional Registered Nurses, 1951. New York, The Association. Processed. p. 7.

Table 13c.—Active registered professional nurses by field of practice, by region and State: 1957

Region and State	Total	Hospital	Public health [1]	Occupational health	Nursing education	Private duty	Office	Other	Unknown
United States	464, 138	275, 047	33, 145	17, 538	13, 679	69, 530	36, 929	4, 892	13, 378
Northeast	161, 679	90, 657	12, 115	6, 189	4, 651	30, 177	7, 950	2, 375	7, 565
North Central	130, 042	82, 334	7, 747	6, 293	4, 540	15, 282	11, 367	833	1, 646
South	100, 055	58, 203	7, 453	3, 093	2, 926	16, 371	8, 505	959	2, 545
West	72, 362	43, 853	5, 830	1, 963	1, 562	7, 700	9, 107	725	1, 622
Alabama	4, 482	2, 888	260	202	123	515	376	61	57
Alaska	357	221	49	3	7	20	46	4	7
Arizona	3, 429	2, 001	392	44	58	454	402	51	27
Arkansas	2, 200	1, 446	152	36	76	222	198	21	49
California	37, 469	21, 420	3, 405	1, 315	768	4, 311	5, 039	282	929
Colorado	6, 071	3, 937	389	98	171	772	523	85	96
Connecticut	13, 762	7, 656	1, 059	629	307	2, 830	716	143	422
Delaware	1, 587	954	141	75	43	241	125	6	2
District of Columbia	3, 734	1, 949	329	125	103	559	246	183	240
Florida	11, 766	7, 090	560	176	195	2, 279	1, 137	74	255
Georgia	6, 360	3, 588	677	255	173	1, 066	505	54	42
Hawaii	1, 893	1, 279	153	73	32	131	166	48	11
Idaho	1, 498	882	95	26	39	145	241	18	52
Illinois	24, 024	14, 138	1, 538	1, 387	985	3, 423	2, 221	144	188
Indiana	10, 593	6, 196	615	660	248	1, 482	1, 253	58	81
Iowa	8, 034	4, 919	384	147	322	911	849	46	456
Kansas	5, 833	3, 771	309	154	230	610	598	30	131
Kentucky	4, 181	2, 485	324	158	104	444	268	86	312
Louisiana	6, 154	3, 485	322	151	164	1, 044	496	53	439
Maine	3, 059	1, 856	171	88	69	624	183	16	52
Maryland	7, 538	4, 710	707	208	319	1, 282	220	44	48
Massachusetts	16, 301	9, 645	1, 298	593	604	2, 735	721	767	438
Michigan	17, 572	11, 246	1, 068	1, 162	508	1, 684	1, 708	148	48
Minnesota	11, 906	8, 651	636	235	349	1, 262	634	51	88
Mississippi	3, 135	1, 839	271	71	56	476	340	23	59
Missouri	8, 841	5, 611	609	351	367	990	668	41	204
Montana	2, 314	1, 528	85	7	83	324	269	8	10
Nebraska	4, 289	3, 057	183	60	138	437	366	28	20
Nevada	656	376	49	7	6	73	83	4	58
New Hampshire	2, 922	1, 762	223	62	99	627	136	10	3
New Jersey	16, 771	9, 217	1, 792	826	380	3, 057	1, 131	163	205
New Mexico	1, 962	1, 282	220	36	27	154	210	17	16
New York	63, 996	36, 309	4, 230	2, 168	1, 810	10, 713	2, 417	1, 108	5, 241
North Carolina	9, 392	5, 728	587	209	215	1, 592	916	43	102
North Dakota	1, 890	1, 345	82	5	96	137	164	42	19
Ohio	24, 137	14, 583	1, 525	1, 554	795	3, 260	2, 043	162	215
Oklahoma	3, 360	1, 973	334	79	174	412	315	20	53
Oregon	5, 360	3, 466	294	99	99	580	749	29	44
Pennsylvania	39, 645	21, 055	2, 963	1, 698	1, 238	8, 896	2, 474	135	1, 186
Rhode Island	3, 268	2, 276	272	101	89	359	125	31	15
South Carolina	4, 342	2, 266	337	175	176	834	471	46	37
South Dakota	1, 559	893	94	4	111	139	170	12	136
Tennessee	5, 065	2, 898	348	257	200	734	328	25	275
Texas	14, 261	7, 729	1, 301	441	401	2, 346	1, 564	136	343
Utah	1, 841	1, 268	145	40	78	88	143	56	23
Vermont	1, 455	881	107	24	55	336	47	2	3
Virginia	8, 239	4, 563	609	262	274	1, 574	694	60	203
Washington	8, 528	5, 508	505	203	177	567	1, 111	112	345
West Virginia	4, 259	2, 612	194	213	130	751	306	24	29
Wisconsin	11, 364	7, 924	704	574	391	947	693	71	60
Wyoming	984	685	49	12	17	81	125	11	4

[1] Includes school nurse.

SOURCE: American Nurses' Association. Research and Statistics Unit. Report of 1956–1958 Inventory of Professional Registered Nurses. New York, The Association, 1963. Processed. p. 12.

Table 13d.—Active registered professional nurses by field of practice, by region and State: 1962

Region and State	Total	Hospital	Public health [1]	Occupational health	Nursing education	Private duty	Office	Other	Unknown
United States	532, 118	335, 404	40, 687	17, 569	16, 294	64, 155	43, 558	2, 496	11, 955
Northeast	174, 299	105, 623	14, 575	6, 025	5, 647	28, 050	9, 411	834	4, 134
North Central	148, 932	99, 693	9, 655	5, 985	5, 009	12, 866	12, 896	542	2, 286
South	115, 544	70, 419	8, 875	3, 347	3, 683	15. 683	9, 702	744	3, 091
West	93, 343	59, 669	7, 582	2, 212	1, 955	7, 556	11, 549	376	2, 444
Alabama	5, 047	3, 085	328	201	180	464	325	17	447
Alaska	683	437	109	5	3	26	94	2	7
Arizona	4, 896	2, 984	564	55	119	495	568	84	27
Arkansas	2, 194	1, 493	156	31	93	193	189	12	27
California	52, 151	32, 241	4, 505	1, 507	938	4, 526	6, 448	111	1, 875
Colorado	6, 825	4, 754	491	126	174	521	678	41	40
Connecticut	11, 365	6, 474	987	477	323	2, 230	727	32	115
Delaware	1, 775	1, 022	206	70	52	238	168	3	16
District of Columbia	4, 000	2, 295	370	188	122	711	224	46	44
Florida	14, 109	8, 462	805	230	234	2, 491	1, 383	185	319
Georgia	7, 816	4, 369	706	232	242	1, 178	594	219	276
Hawaii	1, 974	1, 301	127	62	43	172	241	4	24
Idaho	1, 913	1, 298	122	28	38	135	269	15	8
Illinois	28, 890	17, 864	2, 333	1, 558	918	3, 166	2, 639	112	300
Indiana	11, 223	6, 880	699	619	314	1, 194	1, 381	24	112
Iowa	8, 555	5, 214	446	142	333	745	903	26	746
Kansas	6, 208	4, 061	396	106	237	461	668	10	269
Kentucky	5, 317	3, 728	432	175	202	391	314	18	57
Louisiana	6, 594	4, 124	360	161	205	984	553	14	193
Maine	3, 462	2, 104	202	91	82	602	228	16	137
Maryland	7, 779	4, 856	819	248	325	962	423	34	112
Massachusetts	21, 928	14, 351	1, 589	664	873	3, 123	915	139	274
Michigan	20, 433	14, 157	1, 383	964	598	1, 234	1, 872	77	148
Minnesota	13, 192	9, 790	751	226	454	1, 100	701	21	149
Mississippi	3, 141	1, 950	290	68	80	389	300	5	59
Missouri	9, 151	6, 170	643	327	397	703	689	27	195
Montana	2, 412	1, 576	115	5	87	265	288	5	71
Nebraska	4, 587	3, 273	195	72	200	356	412	18	61
Nevada	888	578	77	11	17	69	112	2	22
New Hampshire	2, 947	1, 867	236	65	103	422	211	27	16
New Jersey	21, 860	12, 770	2, 438	899	567	3, 363	1, 612	63	148
New Mexico	2, 080	1, 273	225	63	36	168	228	15	72
New York	67, 199	40, 621	5, 547	2, 266	2, 146	10, 746	2, 951	415	2, 507
North Carolina	10, 793	6, 874	689	246	420	1, 347	1, 071	11	135
North Dakota	2, 138	1, 572	86	1	112	163	175	3	26
Ohio	29, 381	19, 654	1, 770	1, 422	933	2, 831	2, 420	163	188
Oklahoma	3, 948	2, 460	312	91	125	434	384	8	134
Oregon	6, 209	4, 156	361	82	135	522	874	60	19
Pennsylvania	40, 497	24, 012	3, 151	1, 447	1, 360	6, 933	2, 585	125	884
Rhode Island	3, 381	2, 381	290	90	131	329	118	11	31
South Carolina	5, 184	2, 986	369	185	162	799	560	21	102
South Dakota	1, 896	1, 261	96	5	132	135	205	5	57
Tennessee	6, 324	4, 031	453	259	259	790	395	21	116
Texas	17, 222	9, 979	1, 560	478	484	2, 175	1, 711	84	751
Utah	2, 222	1, 561	181	69	90	95	206	3	17
Vermont	1, 660	1, 043	135	26	62	302	64	6	22
Virginia	9, 886	5, 695	802	285	356	1, 619	820	41	268
Washington	10, 024	6, 799	636	183	251	495	1, 396	30	234
West Virginia	4, 415	3, 010	218	199	142	518	288	5	35
Wisconsin	13, 278	9, 797	857	543	381	778	831	56	35
Wyoming	1, 066	711	69	16	24	67	147	4	28

[1] Includes school nurse.

SOURCE: Marshall, Eleanor D., and Moses, Evelyn B. The Nation's Nurses. Inventory of Professional Registered Nurses. New York, The American Nurses' Association, 1965, p. 29

Table 14a.—Active registered professional nurses by type of position, by region and State: 1949

Region and State	Total	Administrator or assistant	Consultant	Supervisor or assistant	Instructor	Head nurse or assistant	Staff or general duty nurse	Other	Unclassified [1]
United States	299, 067	10, 973	1, 394	32, 203	6, 913	28, 698	101, 527	4, 532	112, 827
Northeast	103, 206	4, 031	440	10, 449	2, 726	10, 873	33, 253	1, 392	40, 042
North Central	83, 847	3, 108	436	9, 787	2, 088	8, 100	30, 200	1, 221	28, 907
South	59, 422	2, 080	328	7, 192	1, 288	5, 201	18, 297	1, 130	23, 906
West	52, 592	1, 754	190	4, 775	811	4, 524	19, 777	789	19, 972
Alabama	2, 886	86	9	410	61	231	918	72	1, 099
Alaska	471	29	11	38	2	36	229	9	117
Arizona	1, 291	40	5	95	13	83	445	30	580
Arkansas	964	38	11	125	14	91	269	32	384
California	32, 707	916	98	2, 846	425	2, 747	12, 363	491	12, 821
Colorado	3, 210	135	13	344	64	324	1, 229	45	1, 056
Connecticut	5, 569	217	39	557	145	574	1, 999	72	1, 966
Delaware	967	40	5	107	30	67	300	17	401
District of Columbia	3, 328	146	60	236	83	416	1, 235	47	1, 105
Florida	4, 399	132	18	519	44	224	1, 210	70	2, 182
Georgia	3, 522	141	42	433	88	338	1, 018	109	1, 353
Hawaii	1, 095	59	8	121	24	105	497	14	267
Idaho	1, 002	56	1	127	18	67	312	20	401
Illinois	21, 542	711	129	2, 887	517	2, 176	6, 958	366	7, 798
Indiana	5, 706	183	28	571	120	514	1, 860	51	2, 379
Iowa	4, 022	129	8	491	72	253	1, 448	60	1, 561
Kansas	3, 521	137	25	528	77	271	1, 099	32	1, 352
Kentucky	2, 689	91	5	323	48	245	982	59	936
Louisiana	3, 879	109	23	415	85	450	1, 230	89	1, 478
Maine	2, 061	107	6	194	33	148	598	23	952
Maryland	4, 580	179	18	568	128	531	1, 640	55	1, 461
Massachusetts	14, 726	825	59	1, 752	427	1, 708	4, 153	162	5, 640
Michigan	12, 047	434	72	1, 193	289	1, 036	4, 915	217	3, 891
Minnesota	5, 789	272	29	579	168	666	2, 292	116	1, 667
Mississippi	1, 538	52	3	228	26	97	494	37	601
Missouri	5, 134	205	41	621	113	560	1, 653	62	1, 879
Montana	1, 201	64	8	154	28	121	388	9	429
Nebraska	1, 956	90	8	262	49	133	640	37	737
Nevada	305	11	—	22	5	22	118	6	121
New Hampshire	1, 460	57	4	168	31	123	458	12	607
New Jersey	9, 235	351	28	997	240	914	2, 678	120	3, 907
New Mexico	820	40	8	82	13	54	311	11	301
New York	44, 163	1, 634	221	4, 240	1, 193	5, 255	15, 280	530	15, 810
North Carolina	4, 855	141	15	631	102	379	1, 646	82	1, 859
North Dakota	828	46	3	124	27	85	288	22	233
Ohio	15, 951	606	64	1, 675	494	1, 691	5, 982	159	5, 280
Oklahoma	2, 127	92	13	317	40	149	542	34	940
Oregon	3, 478	129	17	310	83	289	1, 071	70	1, 509
Pennsylvania	23, 252	698	70	2, 302	604	1, 930	7, 022	442	10, 184
Rhode Island	1, 517	74	6	123	32	162	652	17	451
South Carolina	2, 133	60	17	307	38	139	578	43	951
South Dakota	985	60	4	149	22	91	321	10	328
Tennessee	3, 151	104	28	378	88	337	1, 059	41	1, 116
Texas	11, 129	412	33	1, 336	256	968	2, 882	223	5, 019
Utah	1, 238	52	5	114	33	139	537	11	347
Vermont	1, 223	68	7	116	21	59	413	14	525
Virginia	4, 521	163	14	529	99	371	1, 429	90	1, 826
Washington	5, 233	204	16	461	99	497	2, 041	68	1, 847
West Virginia	2, 754	94	14	330	58	168	865	30	1, 195
Wisconsin	6, 366	235	25	707	140	624	2, 744	89	1, 802
Wyoming	541	19	—	61	4	40	236	5	176
Puerto Rico	1, 466	54	19	252	38	245	527	16	315

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[1] Includes office and private duty nurses.

SOURCE: American Nurses' Association. Inventory of Professional Registered Nurses, 1949. New York, The Association. Processed. p. 18.

Table 14b.—Active registered professional nurses by type of position, by region and State: 1951

Region and State	Total	Administrator or assistant	Consultant	Supervisor or assistant	Instructor	Head nurse or assistant	Staff or general duty nurse	Other	Unclassified [1]
United States	333, 268	11, 788	1, 273	33, 086	6, 610	31, 737	110, 325	6, 082	132, 367
Northeast	114, 629	4, 156	384	10, 530	2, 321	12, 016	36, 776	1, 664	46, 782
North Central	94, 990	3, 448	384	10, 310	2, 251	8, 993	33, 513	1, 874	34, 217
South	67, 422	2, 323	308	7, 457	1, 267	5, 798	19, 427	1, 550	29, 292
West	56, 227	1, 861	197	4, 789	771	4, 930	20, 609	994	22, 076
Alabama	3, 201	99	6	391	51	253	960	80	1, 361
Alaska	289	12	1	29	—	20	131	10	86
Arizona	2, 295	67	7	170	18	174	769	41	1, 049
Arkansas	1, 596	53	16	196	21	151	439	53	667
California	32, 020	928	96	2, 562	352	2, 690	12, 040	416	12, 936
Colorado	3, 453	148	14	304	69	359	1, 291	59	1, 209
Connecticut	7, 348	265	51	595	125	757	2, 440	110	3, 005
Delaware	951	42	5	84	27	85	272	16	420
District of Columbia	3, 060	141	43	226	86	343	1, 129	64	1, 028
Florida	5, 670	176	11	629	40	363	1, 333	113	3, 005
Georgia	4, 251	157	43	472	72	378	1, 025	115	1, 989
Hawaii	1, 100	45	15	109	19	88	450	32	342
Idaho	1, 305	71	—	158	34	104	329	56	553
Illinois	21, 240	680	85	2, 443	510	2, 081	6, 860	446	8, 135
Indiana	7, 181	230	29	718	129	632	2, 111	65	3, 267
Iowa	5, 587	240	17	643	106	397	1, 972	117	2, 095
Kansas	3, 584	154	11	509	79	358	1, 004	50	1, 419
Kentucky	3, 722	123	19	439	71	301	1, 321	52	1, 396
Louisiana	4, 500	130	18	459	94	473	1, 373	126	1, 827
Maine	2, 354	132	2	224	40	198	586	52	1, 120
Maryland	3, 930	192	16	527	126	428	1, 250	78	1, 313
Massachusetts	15, 786	758	47	1, 721	347	1, 958	4, 925	189	5, 841
Michigan	14, 144	481	57	1, 428	283	1, 146	5, 558	340	4, 851
Minnesota	7, 357	309	37	728	184	868	2, 884	184	2, 163
Mississippi	1, 852	65	9	200	31	133	565	69	780
Missouri	5, 688	250	46	774	165	597	1, 712	125	2, 019
Montana	1, 575	61	14	188	46	121	455	41	649
Nebraska	2, 543	133	5	334	58	212	804	66	931
Nevada	482	16	—	38	1	47	192	1	187
New Hampshire	1, 744	82	9	162	28	129	518	10	806
New Jersey	13, 400	415	27	1, 206	228	1, 192	4, 181	121	6, 030
New Mexico	1, 166	47	9	126	10	70	405	29	470
New York	43, 762	1, 576	175	3, 982	875	5, 295	14, 179	569	17, 111
North Carolina	6, 163	154	12	660	117	512	1, 855	129	2, 724
North Dakota	934	51	5	142	24	82	312	40	278
Ohio	17, 524	596	53	1, 735	526	1, 752	6, 431	245	6, 186
Oklahoma	2, 570	110	18	365	41	206	707	33	1, 090
Oregon	3, 902	117	20	332	66	374	1, 288	113	1, 592
Pennsylvania	26, 849	778	54	2, 336	591	2, 148	8, 726	591	11, 625
Rhode Island	2, 149	84	15	180	52	269	844	11	694
South Carolina	2, 861	75	14	309	43	177	775	57	1, 411
South Dakota	1, 124	81	7	169	25	84	397	26	335
Tennessee	3, 754	131	23	409	94	387	1, 167	83	1, 460
Texas	10, 558	391	32	1, 214	169	876	2, 661	327	4, 888
Utah	1, 315	51	5	116	32	153	531	29	398
Vermont	1, 237	66	4	124	35	70	377	11	550
Virginia	5, 672	181	17	550	113	545	1, 628	108	2, 530
Washington	6, 785	278	14	597	122	699	2, 524	156	2, 395
West Virginia	3, 111	103	6	327	71	187	967	47	1, 403
Wisconsin	8, 084	243	32	687	162	784	3, 468	170	2, 538
Wyoming	540	20	2	60	2	31	204	11	210
Puerto Rico	1, 465	59	19	223	47	230	523	42	322

[1] Includes office and private duty nurses.

SOURCE: American Nurses' Association. Inventory of Professional Registered Nurses, 1951. New York, The Association. Processed. p. 8.

Table 14c.—Active registered professional nurses by type of position, by region and State: 1957

Region and State	Total	Administrator or assistant	Consultant	Supervisor or assistant	Instructor	Head nurse or assistant	Staff or general duty nurse	Other[1]	Unknown
United States	464, 138	12, 789	1, 375	38, 997	11, 392	49, 502	212, 476	122, 687	14, 920
Northeast	161, 679	4, 055	405	11, 565	3, 920	16, 464	72, 288	45, 088	7, 894
North Central	130, 042	3, 813	355	11, 801	3, 616	13, 978	63, 369	30, 584	2, 526
South	100, 055	2, 915	328	9, 988	2, 534	10, 544	42, 484	28, 309	2, 953
West	72, 362	2, 006	287	5, 643	1, 322	8, 516	34, 335	18, 706	1, 547
Alabama	4, 482	137	11	491	117	515	2, 037	1, 101	73
Alaska	357	22	—	17	3	32	188	78	17
Arizona	3, 429	89	15	200	47	355	1, 758	932	33
Arkansas	2, 200	105	10	282	71	288	772	539	133
California	37, 469	968	166	2, 868	607	4, 885	17, 390	10, 268	317
Colorado	6, 071	168	23	471	153	569	3, 126	1, 452	109
Connecticut	13, 762	247	28	661	267	1, 130	7, 182	3, 886	361
Delaware	1, 587	37	—	118	37	127	843	418	7
District of Columbia	3, 734	117	42	273	87	528	1, 492	908	287
Florida	11, 766	371	31	1, 061	285	1, 190	4, 985	3, 485	358
Georgia	6, 360	202	34	698	157	705	2, 711	1, 822	31
Hawaii	1, 893	46	12	153	33	149	1, 096	395	9
Idaho	1, 498	56	2	144	40	155	602	447	52
Illinois	24, 024	764	80	2, 432	683	2, 601	10, 973	6, 288	203
Indiana	10, 593	288	39	858	266	1, 076	4, 892	2, 939	235
Iowa	8, 034	219	12	661	189	729	3, 869	2, 052	303
Kansas	5, 833	183	10	644	167	767	2, 610	1, 318	134
Kentucky	4, 181	139	12	484	116	581	1, 581	874	394
Louisiana	6, 154	130	16	591	154	649	2, 217	1, 866	531
Maine	3, 059	100	3	243	54	298	1, 353	946	62
Maryland	7, 538	252	26	754	284	918	3, 553	1, 674	77
Massachusetts	16, 801	628	55	1, 502	478	2, 102	6, 089	4, 949	998
Michigan	17, 572	469	37	1, 590	462	1, 694	8, 359	4, 133	828
Minnesota	11, 906	339	33	923	366	1, 337	6, 480	2, 308	120
Mississippi	3, 135	98	8	326	52	205	1, 398	989	59
Missouri	8, 841	296	44	1, 001	261	1, 118	3, 976	1, 906	239
Montana	2, 314	82	7	219	59	294	977	666	10
Nebraska	4, 289	157	—	390	122	379	2, 281	947	13
Nevada	656	21	1	56	7	43	332	170	26
New Hampshire	2, 922	95	12	256	80	298	1, 348	817	16
New Jersey	16, 771	392	41	1, 260	405	1, 513	8, 413	4, 532	215
New Mexico	1, 962	78	14	159	25	166	1, 074	425	21
New York	63, 996	1, 457	162	4, 060	1, 465	7, 088	27, 977	16, 390	5, 397
North Carolina	9, 392	211	26	876	176	863	4, 223	2, 921	96
North Dakota	1, 890	64	5	189	79	181	923	377	72
Ohio	24, 137	625	64	1, 983	676	2, 908	11, 724	5, 928	229
Oklahoma	3, 360	110	11	325	80	351	1, 597	788	98
Oregon	5, 360	166	16	419	98	571	2, 419	1, 483	188
Pennsylvania	39, 645	976	84	3, 196	1, 036	3, 520	17, 470	12, 540	823
Rhode Island	3, 268	100	18	264	94	395	1, 775	603	19
South Carolina	4, 342	83	7	402	83	270	1, 942	1, 514	41
South Dakota	1, 559	91	7	138	71	168	651	361	72
Tennessee	5, 065	187	15	504	164	645	2, 109	1, 216	225
Texas	14, 261	409	34	1, 702	369	1, 602	5, 396	4, 451	298
Utah	1, 841	57	8	124	68	197	1, 038	331	18
Vermont	1, 455	60	2	123	41	120	681	425	3
Virginia	8, 239	218	31	669	209	802	3, 570	2, 524	216
Washington	8, 528	222	21	725	167	1, 034	3, 787	1, 828	744
West Virginia	4, 259	109	14	432	93	305	2, 058	1, 219	29
Wisconsin	11, 364	318	24	992	274	1, 020	6, 631	2, 027	78
Wyoming	984	31	2	88	15	66	548	231	3

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[1] Includes office and private duty nurses.

SOURCE: American Nurses' Association. Research and Statistics Unit. Report of 1956-58 Inventory of Professional Registered Nurses. New York, The Association, 1963. Processed. Table 13.

Table 14d.—Active registered professional nurses by type of position [1] by region and State: 1962

Region and State	Total	Adminis-trator or assistant	Con-sultant	Supervisor or assistant	Instructor	Head nurse or assistant	Staff or general duty nurse	Other [2]	Unknown
United States	532, 118	17, 193	2, 717	49, 002	15, 349	71, 888	281, 602	77, 128	17, 239
Northeast	174, 299	5, 315	589	14, 592	5, 221	21, 696	89, 391	31, 836	5, 659
North Central	148, 932	5, 187	993	14, 254	4, 760	20, 001	83, 609	16, 566	3, 562
South	115, 544	3, 741	743	12, 121	3, 482	15, 769	56, 257	19, 401	4, 030
West	93, 343	2, 950	392	8, 035	1, 886	14, 422	52, 345	9, 325	3, 988
Alabama	5, 047	178	15	582	172	671	2, 442	642	345
Alaska	683	30	4	49	4	78	458	49	11
Arizona	4, 896	160	23	339	106	628	2, 950	669	21
Arkansas	2, 194	107	13	328	83	375	967	269	52
California	52, 151	1, 556	233	4, 372	961	8, 675	27, 975	5, 189	3, 190
Colorado	6, 825	182	31	619	163	903	4, 191	705	31
Connecticut	11, 365	334	49	820	295	1, 520	5, 822	2, 403	122
Delaware	1, 775	55	9	131	42	210	1, 028	262	38
District of Columbia	4, 000	122	48	345	151	635	1, 674	810	215
Florida	14, 109	353	42	1, 320	250	2, 037	6, 919	2, 871	317
Georgia	7, 816	259	48	843	255	1, 019	3, 382	1, 781	229
Hawaii	1, 974	51	5	147	36	188	1, 199	223	125
Idaho	1, 913	82	4	200	48	319	1, 053	192	15
Illinois	28, 890	1, 260	187	3, 523	816	4, 212	13, 860	3, 845	1, 187
Indiana	11, 223	342	52	1, 032	303	1, 470	6, 551	1, 332	141
Iowa	8, 555	311	29	743	294	977	4, 854	902	445
Kansas	6, 208	223	293	126	215	1, 089	3, 494	579	189
Kentucky	5, 317	203	28	642	182	833	2, 661	499	269
Louisiana	6, 594	195	22	745	177	977	2, 958	1, 231	289
Maine	3, 462	111	3	348	73	420	1, 640	667	200
Maryland	7, 779	309	47	856	312	1, 029	3, 970	1, 104	152
Massachusetts	21, 928	842	47	2, 111	823	2, 811	10, 650	3, 831	813
Michigan	20, 433	830	113	1, 911	666	3, 002	11, 435	1, 805	671
Minnesota	13, 192	420	54	1, 189	427	1, 794	7, 533	1, 498	277
Mississippi	3, 141	110	17	371	72	315	1, 664	505	87
Missouri	9, 151	339	120	1, 097	360	1, 329	4, 715	919	272
Montana	2, 412	98	11	218	59	362	1, 279	328	57
Nebraska	4, 587	169	13	447	182	552	2, 615	523	86
Nevada	888	38	3	88	14	127	510	92	16
New Hampshire	2, 947	112	11	313	80	372	1, 556	481	22
New Jersey	21, 860	677	81	1, 732	479	2, 702	11, 810	3, 637	742
New Mexico	2, 080	80	15	211	27	229	1, 168	256	94
New York	67, 199	1, 890	285	5, 318	1, 985	9, 087	33, 889	12, 179	2, 566
North Carolina	10, 793	257	28	1, 008	349	1, 067	5, 860	1, 706	518
North Dakota	2, 138	71	4	218	93	295	1, 136	230	91
Ohio	29, 381	729	80	2, 536	916	3, 688	17, 814	3, 509	109
Oklahoma	3, 948	183	223	166	115	762	1, 787	502	210
Oregon	6, 209	217	15	570	114	828	3, 718	691	56
Pennsylvania	40, 497	1, 126	86	3, 468	1, 310	4, 105	21, 355	7, 947	1, 100
Rhode Island	3, 381	133	20	310	129	487	1, 881	361	60
South Carolina	5, 184	126	18	531	137	552	2, 751	921	148
South Dakota	1, 896	92	14	168	100	229	1, 038	189	66
Tennessee	6, 324	219	24	694	247	985	2, 952	999	204
Texas	17, 222	669	103	2, 169	477	2, 606	7, 721	2, 781	696
Utah	2, 222	71	11	159	88	291	1, 399	151	52
Vermont	1, 660	90	7	172	47	192	788	330	34
Virginia	9, 886	287	45	891	318	1, 237	5, 018	1, 887	203
Washington	10, 024	347	32	973	238	1, 691	5, 760	690	293
West Virginia	4, 415	109	13	499	143	459	2, 503	631	58
Wisconsin	13, 278	401	34	1, 264	388	1, 364	8, 564	1, 235	28
Wyoming	1, 066	38	5	90	28	103	685	90	27

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[1] Office nurses are classified according to position, and were included with "staff or general duty nurses" if not reported.
[2] Includes private duty nurses.

SOURCE: American Nurses' Association. New York, New York. Unpublished data.

PART III

BIENNIAL ESTIMATES AND EDUCATIONAL PREPARATION OF PROFESSIONAL NURSES

The Interagency Conference on Nursing Statistics is composed of statisticians from various Government and non-Government national agencies concerned with gathering, compiling, and disseminating nursing statistics. Since 1954, the Conference has met once or twice a year to share information and discuss methods of improving the quality of nursing statistics. Its meetings have been attended by representatives from the American Hospital Association, American Nurses' Association, Bureau of the Census, Bureau of Labor Statistics, National League for Nursing, Office of Education, and the Public Health Service. Their cooperative efforts have resulted in more reliable estimates of professional nurse supply, refinement of statistical methodology, joint collection of data, and stimulation of new nursing studies.

The permanent title, Interagency Conference on Nursing Statistics, was approved by the members at their meeting December 3, 1957. At the same time it was agreed that they should continue to meet informally as a working conference rather than as a formal organization.

The biennial national estimates of professional nurses in active practice in the various fields of nursing, compiled by the group (table 15), are based largely on counts made by the employers of nurses, in contrast to the self-enumeration questionnaire method of the census and the inventory, whose data have been shown in parts I and II of this Source Book (Section 2—revised).

The number of nurses actively engaged in nursing increased by 45 percent between 1954 and 1964 according to the Interagency Conference estimates. Slightly less than 1 percent of this increase was due to the admission of Alaska and Hawaii to statehood, reflected in the 1960 estimate. The greatest relative increases were in the fields of nursing education and hospitals. A decrease in numbers of private duty nurses is more than offset by the increase in office nurses, and it is expected that this trend will continue.

As shown in table 15b, the employment of professional nurses on a part-time basis has had a great influence on the upward trend in nurse supply. In the 8-year period from 1956 to 1964 there was an estimated increase of 90,000 nurses working part time. The proportion of total supply these nurses represented was about 10 percent in 1956, increasing to nearly 23 percent 8 years later.

Eighty percent of the part-time professional nurses estimated in 1964 were employed in hospitals and other institutions. These nurses have become an integral part of hospital staffing, contributing about one-fifth of the total nursing service available in short-term general hospitals.[1]

Prior to 1952, accurate information about the academic preparation of nurses was available only in the fields of public health, nursing education, and industry, a little more than 10 percent of the total nurse supply. The first composite estimate of total numbers in all fields holding college degrees was published in January 1954 by Eugene Levine.[2] This estimate was derived by pooling all available data on educational preparation from published and unpublished reports in the different fields of nursing, and from various State surveys of nursing needs and resources (table 17a). Levine's second estimate, based on the 1956 total of 430,000 professional nurses, showed only slight improvement over the 1952 figure (table 17b).

Since 1960, biennial estimates of the educational preparation of professional nurses have been made by the Division of Nursing staff following the Interagency Conference estimates of total nurse supply. Precise figures from the biennial public health nursing counts [3] and the educational preparation of nursing faculty reported by the National League for Nursing are combined with estimates based on reports of nurse traineeships, State surveys, and special studies, to determine the approximate numbers of professional nurses by field who hold baccalaureate or higher degrees. These figures are also checked against the total numbers of degrees in nursing awarded by colleges and universities during the interim periods. As shown in table 16, there is an encouraging upward trend in the proportion of nurses holding baccalaureate or higher degrees, from an estimated 8 percent in 1952 to 11 percent 12 years later. However, this pace must be accelerated considerably if we are to meet the needs projected by the Surgeon General's Consultant Group on Nursing [4] (figure 2).

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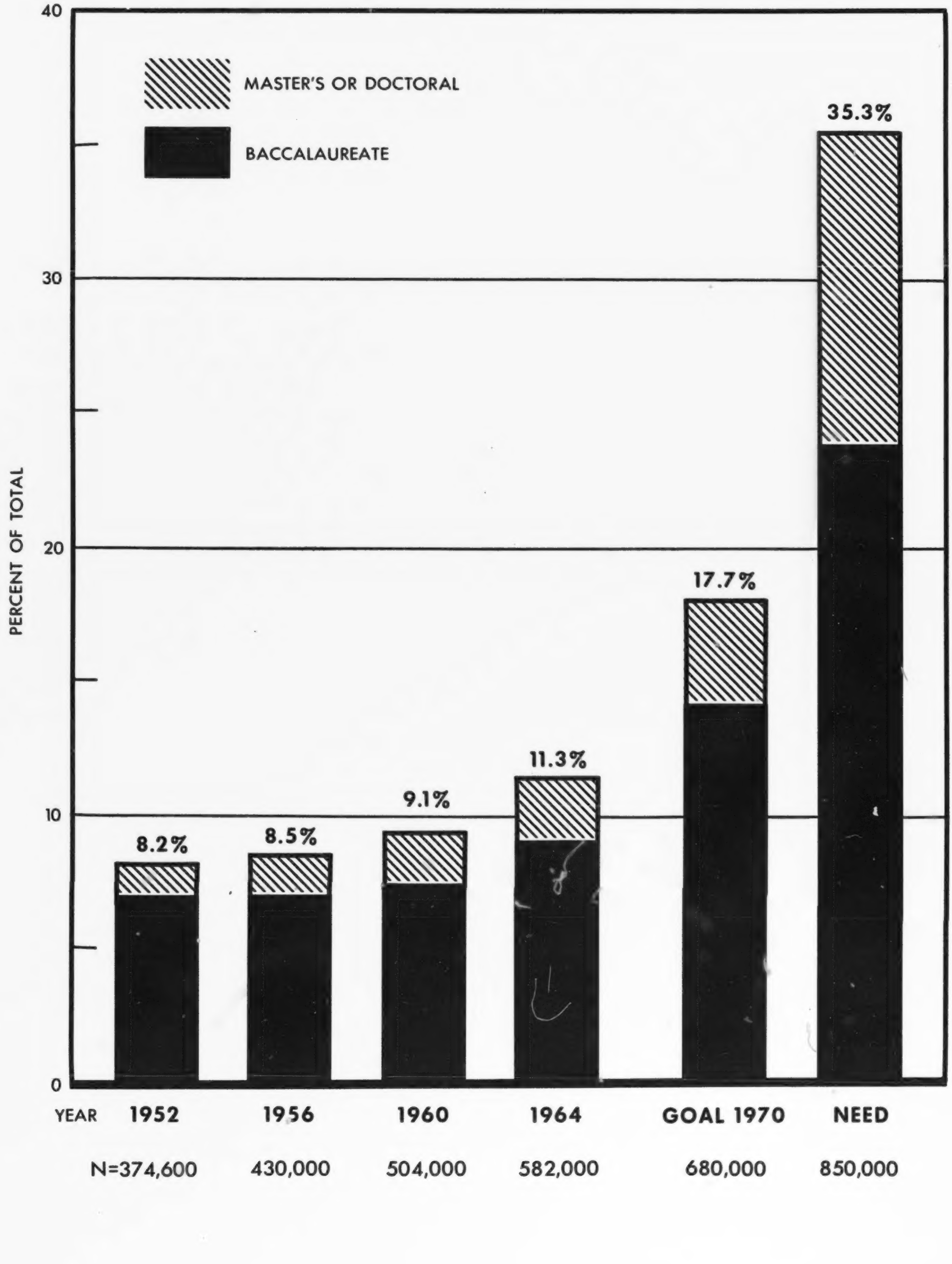
[1] Testoff, Arthur; Levine, Eugene; and Siegel, Stanley E. Analysis of Part-Time Nursing in General Hospitals. Hospitals, Journal of the American Hospital Association, 37 : 17, Sept. 1, 1963.

[2] Levine, Eugene. How Many Nurses Have College Degrees? Nursing Outlook, 2 : 1, January 1954, p. 23.

[3] U.S. Department of Health, Education, and Welfare. Nurses in Public Health. Public Health Service Publication No. 785. Washington, U.S. Government Printing Office, 1964. 59 pp. See also prior counts.

[4] U.S. Department of Health, Education, and Welfare: Toward Quality in Nursing: Needs and Goals. Report of the Surgeon General's Consultant Group on Nursing. Public Health Service Publication No. 992. Washington, U.S. Government Printing Office, 1963. 73 pp.

Figure 2. The proportion of professional nurses with baccalaureate or higher degrees continues to increase, but must accelerate more rapidly to reach the goals.



TABLES IN PART III

Biennial Estimates and Educational Preparation of Professional Nurses

Table 15a. Estimates of professional nurses employed in the United States, by field of practice: January 1 of selected years

Table 15b. Estimates of professional nurses employed full time and part time in the United States, and rates per 100,000 population: January 1 of selected years

Table 16. Highest academic credential of professional nurses practicing in the United States: selected years 1952–64

Table 17a. Estimated number of professional nurses practicing in various fields, by highest academic credentials: 1952 (includes 48 States and the District of Columbia)

Table 17b. Estimated number of professional nurses practicing in various fields, by highest academic credentials: 1956 (includes 48 States and the District of Columbia)

Table 17c. Estimated number of professional nurses practicing in various fields, by highest academic credentials: 1960 (includes 50 States and the District of Columbia)

Table 17d. Estimated number of professional nurses practicing in various fields, by highest academic credentials: 1962 (includes 50 States and the District of Columbia)

Table 17e. Estimated number of professional nurses practicing in various fields, by highest academic credentials: 1964 (includes 50 States and the District of Columbia)

Table 15a.—Estimates of professional nurses employed in the United States, by field of practice: January 1 of selected years

Field of practice	48 States and District of Columbia				50 States and District of Columbia		
	1954	1956	1958	1960	1960	1962	1964
Total	401, 600	430, 000	460, 000	501, 000	504, 000	550, 000	582, 000
Hospitals and related institutions	240, 600	265, 800	291, 500	322, 800	[1] 325, 000	[2] 360, 250	380, 400
Nursing homes	—	—	—	—	—	[3] 7, 000	10, 000
Public health and school	25, 800	27, 200	28, 700	32, 200	32, 400	34, 700	37, 200
Occupational health (industry)	15, 800	17, 000	18, 400	18, 400	18, 500	17, 000	18, 700
Nursing education	8, 700	10, 400	12, 400	15, 800	15, 900	19, 550	20, 700
In professional nursing programs	—	—	—	14, 200	14, 200	16, 750	17, 600
In practical nursing programs	—	—	—	[4] 1, 600	[4] 1, 700	2, 800	3, 100
Private duty	74, 000	72, 000	70, 000	70, 000	70, 200	69, 500	66, 000
Office nurses	35, 200	36, 000	37, 000	39, 800	40, 000	40, 000	47, 000
Other	1, 500	1, 600	2, 000	2, 000	2, 000	2, 000	2, 000

[1] Based on data collected in September, 1959.
[2] Based on data collected in March, 1962.
[3] Prior to 1962, nursing homes were included with hospitals and related institutions.
[4] Prior to 1960, professional nurses teaching in practical nursing programs were not reported separately.

Table 15b.—Estimates of professional nurses employed full time and part time in the United States, and rates per 100,000 population; January 1 of selected years

Year	Population estimate (1,000's)	Total nurse estimate	Rate per 100,000 population	Full-time nurses	Rate per 100,000 population	Part-time nurses	Rate per 100,000 population
48 States and District of Columbia:							
1954	159, 825	401, 600	251	Not estimated.		Not estimated.	
1956	165, 931	430, 000	259	388, 000	234	42, 000	25
1958	171, 922	460, 000	268	383, 800	223	76, 200	44
50 States and District of Columbia:							
1960	178, 736	504, 000	282	413, 300	231	90, 700	51
1962	184, 598	550, 000	298	432, 810	234	117, 190	63
1964	190, 092	582, 000	306	450, 050	237	131, 950	69

SOURCES: Interagency Conference on Nursing Statistics.

U.S. Department of Commerce, Bureau of the Census. Current Population Estimates. Washington, U.S. Government Printing Office. Series P–25, Nos. 203, 262, and 292.

Table 16.—Highest academic credential of professional nurses practicing in the United States: selected year 1952–1964[1]

Year	Number				Percent		
	Total	Master's or doctoral degree	Baccalaureate	Nursing diploma or associate degree	Master's or doctoral degree	Baccalaureate	Nursing diploma or associate degree
1952	374, 600	3, 800	27, 050	343, 750	1. 0	7. 2	91.
1956	430, 000	6, 400	30, 000	393, 600	1. 5	7. 0	91.
1960	504, 000	8, 500	37, 500	458, 000	1. 7	7. 4	90.
1962	550, 000	11, 500	43, 500	495, 000	2. 1	7. 9	90.
1964	582, 000	13, 300	52, 100	516, 600	2. 3	9. 0	88.

[1] Figures for 1960, 1962, and 1964 include Alaska and Hawaii.

SOURCES: Levine, Eugene. How Many Nurses Have College Degrees? Nursing Outlook, 2:1 January 1964, p. 23.
Levine, Eugene. How Many Nurses Now Have College Degrees? Nursing Outlook, 6:12 December 1958.
Estimates made by U.S. Public Health Service, Division of Nursing.

Table 17a.—Estimated number of professional nurses practicing in various fields, by highest academic credentials 1952 (includes 48 States and the District of Columbia)

Field of practice	Number				Percent		
	Total	Master's or doctoral degree	Bacca-laureate	Nursing diploma or associate degree	Master's or doctoral degree	Bacca-laureate	Nursing diploma or associate degree
Total	374, 584	3, 806	27, 039	343, 739	1. 0	7. 2	91.
Hospitals and related institutions	210, 087	2, 007	14, 334	193, 746	1. 0	6. 8	92.
Director and assistant	9, 844	1, 302	3, 544	4, 998	13. 2	36. 0	50.
Supervisor and assistant	22, 781	323	4, 148	18, 310	1. 4	18. 2	80.
Head nurse	34, 740	125	2, 175	32, 440	0. 4	6. 3	93.
Staff, anesthetist, and other	142, 722	257	4, 467	137, 998	0. 2	3. 1	96.
Public health and school	24, 922	497	5, 344	19, 081	2. 0	21. 4	76.
Administrators and supervisors	3, 152	214	1, 768	1, 230	6. 8	54. 2	39.
Staff	21, 770	283	3, 636	17, 851	1. 3	16. 7	82.
Nursing education	10, 406	1, 140	4, 559	4, 707	11. 0	43. 8	45.
Occupational health	11, 000	20	344	10, 636	0. 2	3. 1	96.
Doctors' offices, private duty and other	118, 169	142	2, 458	115, 569	0. 1	2. 1	97.

SOURCE: Levine, Eugene. How Many Nurses Have College Degrees? Nursing Outlook, 2:1, January 1954, p. 23.

Table 17b.—Estimated number of professional nurses practicing in various fields, by highest academic credentials: 1956 (includes 48 States and the District of Columbia)

Field of practice	Number				Percent		
	Total	Master's or doctoral degree	Bacca-laureate	Nursing diploma or associate degree	Master's or doctoral degree	Bacca-laureate	Nursing diploma or associate degree
Total	430, 000	6, 400	30, 000	393, 600	1. 5	7. 0	91. 5
Hospitals and related institutions	265, 800	2, 200	14, 700	248, 900	0. 8	5. 5	93. 7
Director and assistant	11, 400	1, 300	2, 600	7, 500	11. 4	22. 8	65. 8
Supervisor and assistant	23, 900	600	3, 100	20, 200	2. 5	13. 0	84. 5
Head nurse	44, 000	200	2, 800	41, 000	0. 4	6. 4	93. 2
Staff, anesthetist, and other	186, 500	100	6, 200	180, 200	0. 1	3. 3	96. 6
Public health and school	27, 200	1, 300	6, 900	19, 000	4. 8	25. 4	69. 8
Administrators and supervisors	3, 100	800	1, 400	900	25. 8	45. 2	29. 0
Staff	24, 100	500	5, 500	18, 100	2. 1	22. 8	75. 1
Nursing education	10, 400	2, 700	5, 300	2, 400	26. 0	51. 0	23. 0
Occupational health	17, 000	100	800	16, 100	0. 6	4. 7	94. 7
Doctors' offices, private duty and other	109, 600	100	2, 300	107, 200	0. 1	2. 1	97. 8

SOURCE: Levine, Eugene. How Many Nurses Now Have College Degrees? Nursing Outlook 6:12, December 1958.

Table 17c.—Estimated number of professsional nurses practicing in various fields, by highest academic credentials 1960 (includes 50 States and the District of Columbia)

Field of practice	Number				Percent		
	Total	Master's or doctoral degree	Bacca-laureate	Nursing diploma or associate degree	Master's or doctoral degree	Bacca-laureate	Nursing diploma or associate degree
Total	504, 000	8, 500	37, 500	458, 000	1. 7	7. 4	90. 9
Hospitals and related institutions	325, 000	2, 800	18, 300	303, 900	0. 9	5. 6	93. 5
Director and assistant	14, 000	1, 600	3, 200	9, 200	11. 4	22. 9	65. 7
Supervisor and asistant	33, 500	800	4, 400	28, 300	2. 4	13. 1	84. 5
Head nurse	52, 300	200	3, 300	48, 800	0. 4	6. 3	93. 3
Staff, anesthetist, and other	225, 200	200	7, 400	217, 600	0. 1	3. 3	96. 6
Public health and school	32, 400	1, 850	8, 900	21, 650	5. 7	27. 5	66. 8
Administrators and supervisors	3, 600	1, 050	1, 500	1, 050	29. 2	41. 6	29. 2
Staff	28, 800	800	7, 400	20, 600	2. 8	25. 7	71. 5
Nursing education	14, 200	3, 700	7, 200	3, 300	26. 1	50. 7	23. 2
Occupational health	18, 500	50	700	17, 750	0. 3	3. 8	95. 9
Doctors' offices, private duty and other	113, 900	100	2, 400	111, 400	0. 1	2. 1	97. 8

SOURCE: U.S. Public Health Service, Division of Nursing, 1960.

Table 17d.—Estimated number of professional nurses practicing in various fields, by highest academic credentials: 1962 (includes 50 States and the District of Columbia)

Field of practice	Number				Percent		
	Total	Master's or doctoral degree	Baccalaureate	Nursing diploma or associate degree	Master's or doctoral degree	Baccalaureate	Nursing diploma or associate degree
Total	550, 000	11, 500	43, 500	495, 000	2. 1	7. 9	90. 0
Hospital and related institutions	367, 250	3, 200	21, 050	343, 000	0. 9	5. 7	93. 4
Director and assistant	18, 000	2, 000	4, 200	11, 800	11. 1	23. 3	65. 6
Supervisor and assistant	34, 200	800	4, 600	28, 800	2. 3	13. 5	84. 2
Head nurse	58, 000	200	3, 700	54, 100	0. 3	6. 4	93. 3
Staff, anesthetist, and other	257, 050	200	8, 550	248, 300	0. 1	3. 3	96. 6
Public health and school	34, 700	2, 100	10, 500	22, 100	6. 0	30. 3	63. 7
Administrators, and supervisors	3, 800	1, 200	1, 600	1, 000	31. 6	42. 1	26. 3
Staff	30, 900	900	8, 900	21, 100	2. 9	28. 8	68. 3
Nursing education	19, 550	6, 050	8, 800	4, 700	31. 0	45. 0	24. 0
Occupational health	17, 000	50	700	16, 250	0. 3	4. 1	95. 6
Doctors' offices, private duty and other	111, 500	100	2, 450	108, 950	0. 1	2. 2	97. 7

SOURCE: U.S. Public Health Service, Division of Nursing, 1962.

Table 17e.—Estimated number of professional nurses practicing in various fields, by highest academic credentials: 1964 (includes 50 States and the District of Columbia)

Field of practice	Number				Percent		
	Total	Master's or doctoral degree	Baccalaureate	Nursing diploma or associate degree	Master's or doctoral degree	Baccalaureate	Nursing diploma or associate degree
Total	582, 000	13, 300	52, 100	516, 600	2. 3	9. 0	88. 7
Hospital and related institutions	390, 400	3, 700	27, 500	359, 200	1. 0	7. 0	92. 0
Director and assistant	19, 100	2, 200	5, 500	11, 400	11. 5	28. 8	59. 7
Supervisor and assistant	35, 200	900	6, 000	28, 300	2. 6	17. 0	80. 4
Head Nurse	63, 300	300	5, 000	58, 000	0. 5	7. 9	91. 6
Staff, anesthetist, and other	272, 800	300	11, 000	261, 500	0. 1	4. 0	95. 9
Public health and school	37, 200	2, 300	11, 800	23, 100	6. 2	31. 7	62. 1
Administrators, and supervisors	4, 100	1, 300	1, 800	1, 000	31. 7	43. 9	24. 4
Staff	33, 100	1, 000	10, 000	22, 100	3. 0	30. 2	66. 8
Nursing education	20, 700	6, 900	8, 700	5, 100	33. 3	42. 0	24. 7
Professional school	17, 600	6, 500	7, 400	3, 700	36. 9	42. 1	21. 0
Practical nursing school	3, 100	400	1, 300	1, 400	12. 9	41. 9	45. 2
Occupational health	18, 700	100	1, 100	17, 500	0. 5	5. 9	93. 6
Doctor's offices, private duty and other	115, 000	300	3, 000	111, 700	0. 3	2. 6	97. 1

SOURCE: U.S. Public Health Service, Division of Nursing, Manpower Analysis and Resources Branch, 1964.

PART IV

PROFESSIONAL NURSE EDUCATION

The fundamental changes in the character of nursing education since the beginning of this century must be kept in mind whenever consideration is given to statistical data that span very many years. Nursing education began in this country in 1873 with the opening of three schools. These schools offered students an opportunity to learn by doing, under the tutorship for 1 year of a superintendent who had been trained in one of the European schools. Despite the inability of these training programs to meet today's standards, even for practical nurse training, they improved patient care so dramatically that hospitals pushed the opening of new schools and increased the number of students enrolled. At the same time, the course was lengthened to 2 years to make it possible to retain students an additional year as head nurses.

By 1893 about 70 schools were in operation. The earliest counts of schools of nursing and their enrollments are found in the annual reports of the U.S. Commissioner of Education, dating back to 1880. As State licensing bodies came into existence, counts of State approved schools and their students began to be available. Since only graduates of State approved schools could stand for licensure examinations, nonapproved schools tended to close as the effect of licensure became felt. Not until 1923 was machinery for approving schools in operation in every State.[1]

Today there are three types of educational programs which prepare nurses for licensure as registered professional nurses: the traditional hospital program leading to a diploma, the college or university program leading to the baccalaureate degree, and the more recent junior college program leading to an associate degree. These programs are called *initial* programs of professional nursing to distinguish them from post-R.N. baccalaureate and graduate programs for registered nurses, which are discussed in the last part of this section.

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[1] Tibbitts, Helen G., and Levine, Eugene. Health Manpower Source Book, Section 2—Nursing Personnel. Public Health Service Publication No. 263. Washington, U.S. Government Printing Office, 1953. p. 33.

Initial Programs

Tables 18 to 21 have been compiled by State for the total number of schools reported, regardless of the number or type of programs they offer, in order to maintain the trend data. Enrollments by type of program were not reported until 1946; graduations were not listed separately for diploma and degree programs until 1950. As with the other parts of this Source Book, data for the territories are entered wherever available, but are not included in the regional or U.S. totals except where specifically noted. Hawaii is included in the totals for all years, but Alaska still has no professional nursing school.

The number of schools offering initial programs of professional nursing reached its peak in 1929, when 1,885 schools were reported in operation.[2] Since then there was an almost steady decline to 1,110 in 1960, and an upturn to 1,145 in 1964. The closing of schools, however, did not affect the overall national growth in student enrollments, admissions, or graduations. Today, enrollments (including Puerto Rico) have topped the previous all-time high of 128,828 reached in 1946, which reflected the impact of the Cadet Corps Nurse Program.[3] Admissions have followed the same general pattern, with an almost steady rise in the last 14 years. Graduations naturally declined after the 1947 peak of 40,744, then remained at about 30,000 for 6 years, 1956 to 1961,[4] but have increased in the last 3 years to 35,000. It is expected that one effect of the Nurse Training Act of 1964 will be an increase in numbers of qualified students graduating from initial nursing programs.[5] Figure 3 shows the number of schools of professional nursing, their enrollments and graduations for each decade since 1900 as a multiple of the 1900 statistic for each of these three categories.

Admissions to schools offering initial professional nursing programs have increased more than 10,000 in the past 12 years, but in relation to the number of 17-year-old girls in the country the rate has dropped from 3.9 to 3.8 percent. Calculated on the basis of the minimum prerequisite for admission; i.e., high school graduation, the proportion entering professional nursing schools has dropped from 6.7 percent of female high school graduates in 1952 to 5.3 percent in 1964 (table 22).

Data on male students and on Negro students in the initial professional nursing programs are now collected every 3 years by the National League for Nursing (tables 23 and 24).

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[2] Committee on the Grading of Nursing Schools. Results of the First Grading Study of Nursing Schools, sec. 1, p. 13. (State approved schools only) New York, The Committee, 1929.

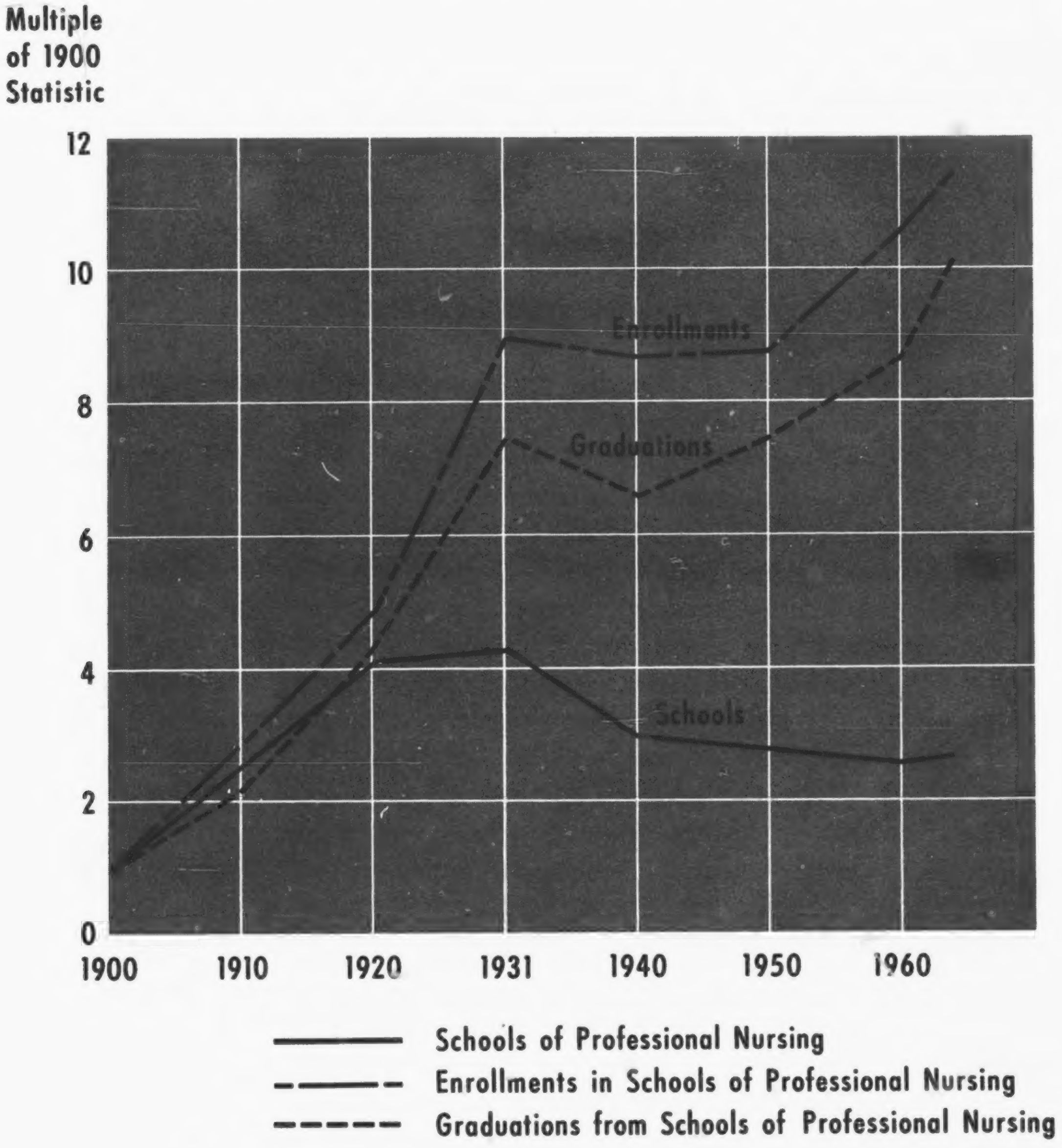
[3] Federal Security Agency*, Public Health Service. The U.S. Cadet Nurse Corps, 1943–48. Public Health Service Publication No. 38. Washington, U.S. Government Printing Office, 1950. 100 pp.

*In 1953, became part of U.S. Department of Health, Education, and Welfare.

[4] U.S. Department of Health, Education, and Welfare. Toward Quality in Nursing: Needs and Goals. Report of the Surgeon General's Consultant Group on Nursing. Public Health Service Publication No. 992. Washington, U.S. Government Printing Office, 1963. 73 pp.

[5] The Nurse Training Act of 1964, Public Law 88-581, September 4, 1964. (Title VIII of the "Public Health Service Act")

Figure 3. The number of schools of professional nursing shows a downward trend, but enrollments and graduations have multiplied over 10 times in the last 6 decades.



During 1962–63, 856 men were admitted, or 1.7 percent of all admissions that year. Nearly a third of all programs reported one or more men enrolled. A total male enrollment of almost 1,800 on October 15, 1963, is the highest ever noted (table 23).

Very little change is evident over the years in the number and percent of Negroes entering nursing schools. On October 15, 1963, about 3 percent of the total enrollment was Negro—the same proportion as reported in 1950.[6]

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[6] Tate, Barbara L. and Carnegie, M. Elizabeth. Negro Admissions, Enrollments, and Graduations—1963. Nursing Outlook, 13 : 2, February 1965, pp. 61–63.

Tables 25 to 30 show evidence of the changes occurring over the past decade in nursing education programs preparing nurses for their increasingly complex responsibilities. All programs have been strengthened, baccalaureate level curricula have grown substantially, and the new junior college programs are increasing rapidly. The number of diploma programs has decreased over the years, but they still admit the majority of nursing students and their enrollments have fluctuated only slightly.

All of the initial professional nursing programs counted were accredited by the appropriate legally-authorized State agency. Accreditation by a national accrediting agency, as designated by the Commissioner of Education, has been stipulated as a requirement for participation in the Nurse Training Act of 1964.[7] The Commissioner designated the National League for Nursing, which has been serving as the professional accrediting agency for more than 10 years.[8] The proportion of diploma programs so accredited in the last 10 years has risen from 23 to 68 percent and baccalaureate programs from 39 to 71 percent (table 29). More than 78 percent of the diploma students and 87 percent of the initial baccalaureate students in 1965 were enrolled in programs accredited by the National League for Nursing (table 30).

The associate degree programs are faced with a different situation in that they are usually contained in junior or community colleges. These 2-year colleges, as a general rule, apply for institutional accreditation from their own accrediting body, but usually do not make application to the profession for accreditation of individual programs within the institution.

For many years, the overall withdrawal rates of students from schools offering initial programs of professional nursing have remained around 33 percent,[8] or the equivalent of a 67-percent completion rate. By type of program, the students in diploma schools show a consistently higher completion rate than those in baccalaureate or associate degree programs (table 31). This factor may be directly related to the type of support, since about half of the universities and 87 percent of the junior colleges are publicly supported; or it may be determined by the year in which the nursing major is introduced into the curriculum. Figures for the early years of the associate degree programs are atypical and should be disregarded in considering trends.

The completion rates are, by necessity, approximations. The most accurate method of computing completion rates is to consider a cohort of admissions until they have all completed their nursing education or until they have withdrawn. If some persons changed schools or took longer than the time needed to complete the nursing curriculum the statistics could be effectively treated by a cohort method. The method used for table 31 is an approximation to a cohort method by which the admissions in a particular year are compared with graduations after the normal curriculum time has elapsed. In this instance it is assumed that the number of students who do not graduate on time is approximately counterbalanced by graduates who were admitted prior to the admission date of the cohort. The major shortcoming of the approximate cohort method used is that initial programs of professional nursing education vary in length. However, when data on admissions and graduations for nearly 150 collegiate programs were examined by staff of the Division of Nursing and the Division of Hospital and Medical Facilities, U.S. Public Health Service, the results showed that, when such schools were considered individually, the median completion rate for students entering directly from high school was not significantly different from that obtained for all baccalaureate programs by the method used here.

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[7] The Nurse Training Act of 1964, Public Law 88–581, Sept. 4, 1964 (Title VIII of the "Public Health Service Act").

[8] American Nurses' Association. Facts About Nursing: A Statistical Summary, 1965 ed. New York, The Association, 1965, p. 81.

A comparison of the 1957 and 1964 figures for all initial professional nursing programs in the States and regions shows that the United States as a whole and all four regions increased enrollments, admissions, and graduations within this time period (table 32, 33, and 34). However, 10 States reported a decrease in enrollments, 10 States had fewer admissions, and 12 States showed fewer graduations in 1964 than in 1957. The overall increase in numbers of students is due to the spectacular rise in the associate degree programs and the continuing growth of the initial baccalaureate programs. In this period, numbers admitted to the 2-year junior college programs increased by 3,883 or almost 8 times the number admitted in 1957 (table 33). Twenty-eight States reported admissions to these programs in 1964; only 9 in 1957. All except eight States showed an increase in admissions to the baccalaureate programs.

The diploma programs have maintained a fairly constant admission level, increasing admissions over this period by about 200 students (table 33). When Puerto Rico is included in the totals, the increase is 365 students. Regionally, the Northeast and North Central sections increased somewhat between 1957 and 1964, but admissions decreased in the South by about 100, and in the West by almost 300 students. Twenty-eight States showed fewer admissions to diploma programs in 1964 than in 1957, but in 18 of these the losses were counterbalanced by increases in numbers admitted to the associate and baccalaureate programs.

Post-R.N. Baccalaureate and Graduate Degree Programs

Many graduates of diploma and associate degree programs have found it necessary, both for their own professional satisfaction and to meet job specifications, to attend college in order to complete the academic requirements for a baccalaureate degree. The current trend in nursing education indicates that most of these graduate nurses enroll in the initial baccalaureate programs. Others enroll in programs for graduate nurses only. For statistical clarity, all graduate nurses preparing for their baccalaureate are designated as post-R.N. baccalaureate, and are counted separately from those students, tabulated in tables 19 through 34, who have had no previous nursing training.

In 1964, a total of 9,375 graduate nurses (including 95 in Puerto Rico) were enrolled either full time or part time in programs leading to a post-R.N. baccalaureate degree (table 35). Graduated from these programs were 2,445 nurses, an increase of 5 percent over the previous year, and 15 percent more than in 1957 (table 36). However, the minimum goal of 5,000 post-R.N. baccalaureate graduates yearly by 1970 is no closer now than it was in 1961 when data were compiled for the report of the Surgeon General's Consultant Group on Nursing.[9]

In nursing, as in other professional disciplines, preparation for supervision, administration, teaching, and clinical specializaton requires education at the master's or doctoral level. The upward trend in numbers of nurses taking the advanced preparation necessary for such leadership positions in nursing is encouraging, but will need even greater impetus in order to reach the minimum goal expressed by the Consultant Group; i.e., 3,000 annual graduates from master's and doctoral degree programs by 1970.[10] The 1,282 master's and 19 doctoral graduates of 1964 represent a total increase of 79 percent since 1957, but the current number must be more than doubled in the next 5 years if the 1970 goal is to be met (figure 4).

The Health Amendments Act of 1956 [11] established the professional nurse traineeship program to enable professional nurses to study full time in institutions of higher learning. The purpose of the program is to improve the quality of patient care by increasing the supply of nurses who are qualified for teaching, administrative, and supervisory positions. This program, which originally provided for 1 academic year of full-time study, was extended in 1959 to include assistance for professional nurses enrolled in short-term courses.[12] Both long-term and short-term study are now included in the provisions of the Nurse Training Act of 1964.[13]

From 1957 to 1963, almost 11,000 professional nurse trainees were supported under the traineeship program for full-time study. The three sections of table 37 show the distribution of these trainees by field and level of study, and by the area of service for which they were preparing. More than half were preparing for teaching positions.

Table 38 is a composite showing all academic degrees in nursing conferred by higher educational institutions in selected years. The baccalaureate degrees

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[9] U.S. Department of Health, Education, and Welfare. Toward Quality in Nursing: Needs and Goals. Report of the Surgeon General's Consultant Group on Nursing. Public Health Service Publication No. 992. Washington, U.S. Government Printing Office, 1963, p. 22.

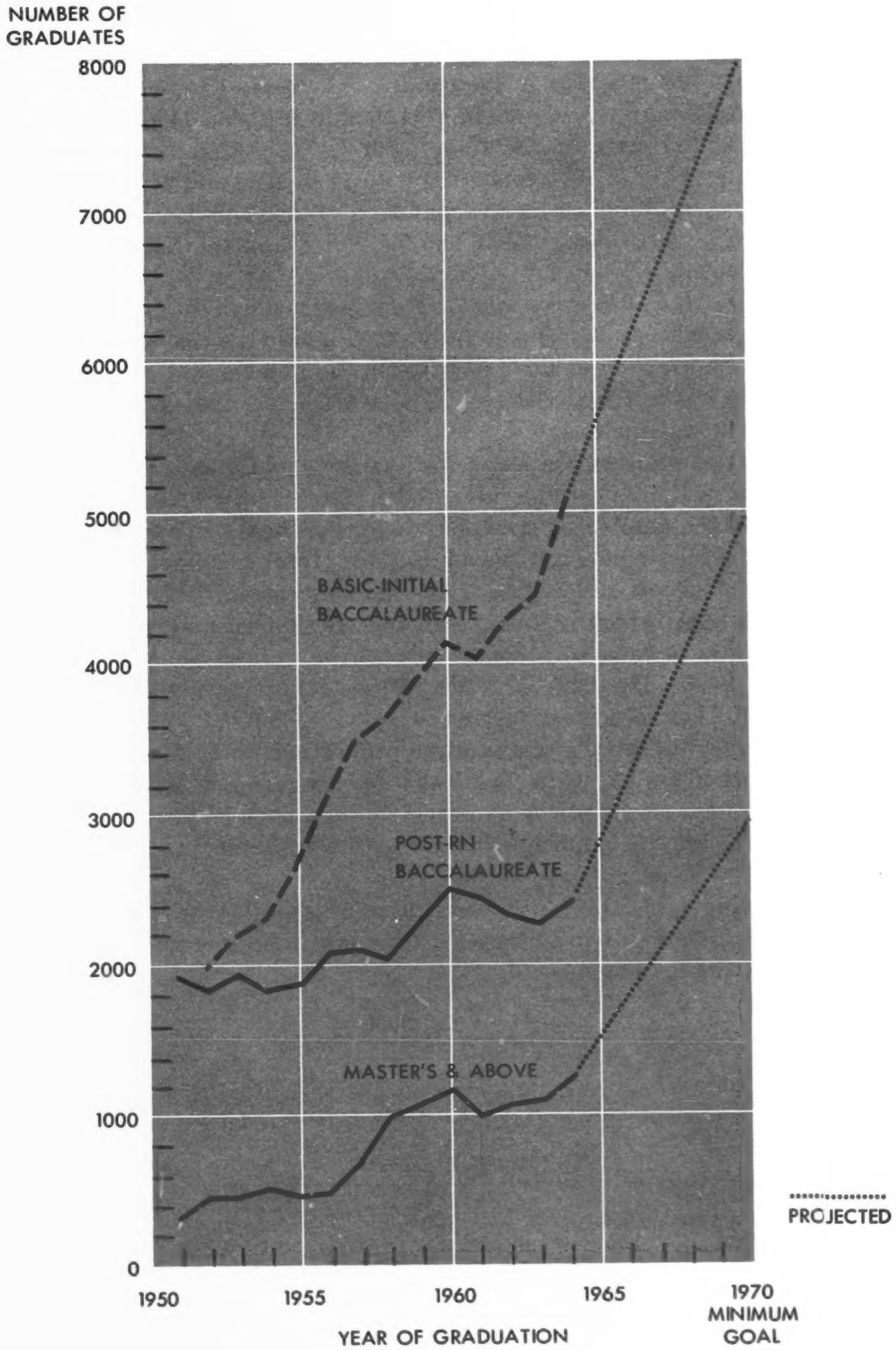
[10] U.S. Department of Health, Education, and Welfare. Toward Quality in Nursing: Needs and Goals. Report of the Surgeon General's Consultant Group on Nursing. Public Health Service Publication No. 992. Washington, U.S. Government Printing Office, 1963, pp. 18, 19, and 22.

[11] Section 307 of the Public Health Service Act. Title II, Public Law 911, 84th Cong., 2d sess., Aug. 2, 1956.

[12] Ibid., as amended by Public Law 86–105, July 23, 1959.

[13] The Nurse Training Act of 1964, Public Law 88–581, Sept. 4, 1964. (Title VIII of the "Public Health Service Act")

Figure 4. Many more nurses must obtain baccalaureate and graduate degrees if 1970 goals are to be reached.



include those earned in initial programs as well as in post-R.N. baccalaureate programs. The master's degrees include the few students awarded such degrees from initial programs prior to 1957–58. The trend in all areas is generally upward.

For the State data on earned degrees (table 39) Puerto Rico is listed, but its graduates are not included in the totals. All States showed considerably more baccalaureate degrees awarded in 1964 than in 1940, but 14 States reported a greater number conferred in 1960 than in 1964. Only 4 States reported master's degrees in nursing in 1940 compared with 12 in 1950 and 26 in 1964. Regionally, the number of higher degrees conferred by institutions in the Northeast region was less in 1964 than in 1960, but the North Central, South, and West showed improvement.

Between 1936 and 1949 great improvement was made in the faculty-student ratio in professional nursing schools (table 40). Over the last 15-year period, however, most States showed some increase in the number of students per instructor, though not to the 1936 level. The average enrollment per school increased in all States except one.

The number of students per instructor was obtained for each State by dividing enrollments in the initial and advanced programs of professional nursing for the State by the number of nurse instructors in these programs. Average enrollment per school was computed by dividing total enrollment for a State by the number of schools in the State. All computations in Table 40 were based only on those schools which reported both faculty number and student enrollment. Instructors in some of these schools taught in both the initial and the advanced programs. The table does not include registered nurses teaching in schools of practical or vocational nursing.

Most encouraging are the comparative proportions in 1949 and in 1964 of nurse faculty members in professional nursing programs who hold academic degrees (table 41). Every region and every State show a large increase in this proportion, although the numbers of instructors reported by 12 States and Puerto Rico were less in 1964 than in 1949.

The following table shows the percentage distribution of full-time nurse faculty members employed in all types of nursing programs in January 1964 according to the highest degree held:

Program in which employed	Percent of full-time nurse faculty by highest academic credential, 1964 [1]				
	Total	Diploma	Associate degree	Baccalaureate	Master's or doctoral
Baccalaureate and higher degree	100.0	0.2	—	15.2	84.6
Associate degree	100.0	0.8	3.2	26.6	69.4
Diploma	100.0	25.2	1.4	51.8	21.6
Practical nursing	100.0	41.9	2.6	42.1	13.4

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[1] Based on replies from 195 baccalaureate and higher degree programs, 82 associate degree, 801 diploma, and 584 practical nursing programs.

Source: American Nurses' Association: Facts About Nursing, 1965 ed. New York, The Association, 1965, pp. 42–43.

TABLES IN PART IV

Professional Nurse Education

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Table 18.—Number of schools offering initial programs in professional nursing, by region and State: selected years 1900–1964

Region and State	Schools[1]							
	1900	1910	1920	1931	1940	1950	1960	1964
United States	432	1, 105	1, 755	1, 844	1, 304	1, 193	1, 114	1, 145
Northeast	238	436	587	566	410	395	370	383
North Central	128	354	582	583	410	365	343	343
South	44	212	421	539	367	320	288	290
West	22	103	165	156	117	113	113	129
Alabama	1	7	26	36	27	16	13	14
Alaska	—	—	—	—	—	—	—	—
Arizona	—	—	2	3	4	5	6	7
Arkansas	—	5	16	23	10	8	7	6
California	10	47	68	53	36	40	56	62
Colorado	5	15	20	20	16	10	9	12
Connecticut	7	19	25	25	19	21	19	20
Delaware	2	2	3	6	7	7	6	7
District of Columbia	8	10	14	12	7	8	6	7
Florida	1	5	12	18	14	14	18	22
Georgia	2	25	32	39	15	15	18	19
Hawaii	—	—	—	. . .	. . .	3	3	4
Idaho	—	3	7	10	8	8	4	4
Illinois	34	74	114	134	95	87	72	70
Indiana	7	29	32	33	27	27	24	27
Iowa	10	35	59	46	29	26	26	25
Kansas	5	15	42	51	37	27	22	19
Kentucky	3	14	23	31	16	15	16	20
Louisiana	3	7	14	17	14	17	12	13
Maine	4	13	28	32	18	12	6	6
Maryland	9	21	26	28	26	22	21	20
Massachusetts	53	77	96	102	69	61	56	60
Michigan	17	42	44	48	30	26	30	32
Minnesota	13	29	57	59	28	27	25	27
Mississippi	—	5	22	37	33	21	10	11
Missouri	14	30	48	39	30	27	28	28
Montana	—	6	14	16	10	6	4	5
Nebraska	2	18	33	19	14	14	14	14
Nevada	—	—	1	—	—	—	1	1
New Hampshire	8	15	23	23	14	13	12	10
New Jersey	19	33	46	52	49	42	39	38
New Mexico	—	1	2	2	2	1	2	2
New York	78	137	161	152	105	113	118	132
North Carolina	—	26	53	59	41	40	33	34
North Dakota	—	4	15	17	15	10	10	9
Ohio	17	53	81	80	68	63	59	58
Oklahoma	—	5	25	22	14	12	10	11
Oregon	2	4	13	13	9	10	6	5
Pennsylvania	63	123	183	154	118	117	109	105
Rhode Island	5	7	11	14	7	7	7	7
South Carolina	2	10	23	26	17	18	15	11
South Dakota	—	7	18	21	13	7	10	11
Tennessee	2	9	22	30	23	16	18	17
Texas	1	20	40	70	45	34	34	34
Utah	1	4	7	6	6	8	6	7
Vermont	1	12	14	12	11	9	4	5
Virginia	9	23	37	45	27	34	33	28
Washington	3	20	26	27	25	22	15	19
West Virginia	1	18	33	40	31	23	18	16
Wisconsin	9	18	39	36	24	24	23	23
Wyoming	1	3	5	6	1	—	1	1
Puerto Rico	—	—	—	. . .	. . .	10	9	8

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[1] Data for 1950 and later are for State approved schools of nursing. Data for the other years include some nonapproved schools. The number of these nonapproved schools was very small in 1940, but was a larger part of the total number of schools in earlier years due to the less widespread prevalence of State laws governing the requirements for schools of nursing.

SOURCES: Tibbitts, Helen G., and Levine, Eugene. Health Manpower Source Book, Section 2—Nursing Personnel. Public Health Service Pub. No. 263. Washington, U.S. Government Printing Office, 1953, p. 35.
American Nurses' Association. Facts About Nursing: A Statistical Summary, 1961 ed. New York, The Association, 1961, p. 98.
National League for Nursing. State-Approved Schools of Professional Nursing. New York, The League, 1965, p. 99.

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Table 19.—Student enrollment[1] in schools offering initial programs in professional nursing, by region and State: selected years 1900–64

Region and State	Student enrollment[2]							
	1900	1910	1920	1931[3]	1940	1950	1960	1964
United States	11, 164	31, 851	54, 953	100, 419	97, 345	98, 203	118, 163	128, 429
Northeast	6, 331	14, 870	21, 408	36, 569	33, 742	34, 803	41, 535	45, 012
North Central	3, 384	9, 652	18, 035	34, 408	31, 826	32, 134	39, 785	41, 741
South	912	4, 389	9, 817	19, 591	21, 952	22, 318	25, 468	27, 429
West	537	2, 940	5, 693	9, 851	9, 825	8, 948	11, 375	14, 247
Alabama	37	184	537	1, 155	1, 231	976	1, 165	1, 397
Alaska	—	—	—	—	—	—	—	—
Arizona	—	—	40	178	335	402	732	968
Arkansas	—	89	210	503	425	621	653	535
California	346	1, 573	3, 051	4, 724	4, 077	3, 444	4, 918	6, 770
Colorado	73	413	661	1, 206	1, 127	876	990	1, 320
Connecticut	183	544	1, 148	1, 795	1, 864	2, 276	2, 644	2, 647
Delaware	22	35	44	219	369	422	407	394
District of Columbia	254	427	1, 208	1, 183	890	660	810	972
Florida	10	67	178	678	916	950	1, 587	2, 291
Georgia	65	424	738	1, 235	1, 074	1, 597	2, 028	2, 457
Hawaii	—	—	—	. . .	. . .	300	362	392
Idaho	—	30	108	272	394	421	241	259
Illinois	1, 012	2, 916	4, 004	7, 466	7, 046	6, 586	7, 638	7, 722
Indiana	126	541	1, 017	2, 132	2, 366	2, 326	3, 141	3, 216
Iowa	230	929	1, 772	2, 240	2, 099	2, 047	2, 393	2, 461
Kansas	71	200	651	1, 592	1, 690	1, 493	1, 519	1, 507
Kentucky	56	198	417	1, 071	974	1, 162	1, 343	1, 413
Louisiana	59	282	565	1, 048	1, 497	1, 565	1, 485	1, 592
Maine	77	315	508	903	840	776	695	654
Maryland	186	764	903	1, 778	2, 085	1, 815	2, 402	2, 860
Massachusetts	1, 521	2, 695	4, 687	6, 668	5, 672	5, 560	6, 500	7, 189
Michigan	754	1, 297	1, 851	3, 676	2, 907	3, 341	4, 321	5, 090
Minnesota	296	810	2, 266	3, 776	3, 231	3, 341	3, 689	3, 787
Mississippi	—	78	308	667	793	778	525	603
Missouri	321	750	1, 522	2, 176	2, 205	2, 439	3, 266	3, 436
Montana	—	119	292	551	619	555	549	551
Nebraska	24	362	726	1, 212	1, 070	1, 114	1, 378	1, 632
Nevada	—	—	9	—	—	—	43	86
New Hampshire	113	425	399	766	727	616	652	733
New Jersey	356	891	1, 329	3, 148	3, 817	2, 855	3, 758	3, 991
New Mexico	—	12	3	61	65	46	119	148
New York	2, 304	4, 775	6, 433	11, 724	10, 080	11, 074	13, 175	15, 201
North Carolina[3]	—	330	788	1, 660	1, 821	2, 515	2, 756	2, 995
North Dakota	—	55	384	727	831	774	752	825
Ohio	350	1, 292	2, 508	5, 389	5, 732	5, 500	7, 816	7, 920
Oklahoma	—	48	427	789	797	790	891	793
Oregon	50	159	334	726	765	804	935	987
Pennsylvania	1, 611	4, 673	6, 119	9, 811	9, 625	10, 754	12, 865	13, 078
Rhode Island	158	371	573	1, 396	585	531	858	1, 022
South Carolina	21	272	436	808	1, 020	1, 047	1, 200	1, 053
South Dakota	—	80	288	541	613	811	824	875
Tennessee	22	172	619	1, 351	1, 780	1, 531	2, 026	1, 774
Texas	18	364	1, 103	2, 669	3, 331	2, 542	2, 702	2, 654
Utah	26	135	273	441	487	429	646	658
Vermont	8	181	212	358	532	361	388	497
Virginia	150	390	809	1, 661	1, 673	2, 119	2, 280	2, 399
Washington	36	453	805	1, 525	1, 912	1, 671	1, 753	1, 977
West Virginia	12	265	527	1, 116	1, 276	1, 228	1, 208	1, 247
Wisconsin	200	420	1, 046	3, 481	2, 036	2, 362	3, 048	3, 270
Wyoming	6	46	117	167	44	—	87	131
Puerto Rico	—	—	—	. . .	. . .	509	686	840

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[1] Enrollments are for the schools in the previous table.

[2] Figures for 1900–1940 are fall enrollments; those for 1950 are as of Jan. 1; the 1960 and 1964 figures are as of Oct. 15 of those years.

[3] High student enrollment may have been related to economic conditions.

SOURCE: Tibbitts, Helen G., and Levine, Eugene. Health Manpower Source Book, Section 2—Nursing Personnel, Public Health Service Pub. No. 263. Washington, U.S. Government Printing Office, 1953, p. 35.

American Nurses' Association. Facts About Nursing: A Statistical Summary, 1961 ed. New York, The Association, 1961, p. 83.

National League for Nursing. State-Approved Schools of Professional Nursing. New York, The League, 1965, p. 99.

Table 20.—Admissions to schools offering initial programs in professional nursing, by region and State: selected years 1936–64

Region and State	Academic year[1] ending June 30			Calendar year			Academic year[2] ending Aug. 31	
	1936	1940	1945	1945	1950	1955	1960	1964
United States	28, 843	37, 200	61, 471	56, 567	44, 185	46, 267	48, 919	52, 274
Northeast	10, 275	12, 264	19, 718	18, 454	15, 389	15, 396	16, 830	17, 158
North Central	9, 358	11, 936	20, 631	18, 523	14, 278	15, 601	16, 433	17, 036
South	6, 466	8, 611	15, 208	14, 009	10, 375	10, 628	10, 841	11, 609
West	2, 744	4, 389	5, 914	5, 581	4, 143	4, 642	4, 815	6, 471
Alabama	316	489	633	642	512	416	481	617
Alaska	—	—	—	—	—	—	—	—
Arizona	61	124	183	194	181	200	318	547
Arkansas	108	179	309	286	254	315	320	208
California	1, 109	2, 093	2, 028	1, 929	1, 743	1, 968	2, 124	3, 066
Colorado	329	412	803	649	410	487	431	525
Connecticut	617	663	1, 213	1, 125	870	1, 005	1, 047	981
Delaware	118	132	227	250	183	167	166	203
District of Columbia	344	340	595	525	246	247	277	339
Florida	237	354	567	599	523	553	689	1, 449
Georgia	348	413	1, 256	1, 166	802	788	805	1, 023
Hawaii	. . .	. . .	. . .	. . .	. . .	132	150	168
Idaho	109	156	253	196	179	147	123	148
Illinois	2, 001	2, 630	4, 395	3, 939	3, 217	3, 008	3, 304	3, 112
Indiana	657	859	1, 653	1, 483	1, 030	1, 186	1, 446	1, 061
Iowa	589	808	1, 162	910	881	1, 014	869	978
Kansas	485	646	1, 011	920	839	639	754	790
Kentucky	259	355	645	547	588	508	524	579
Louisiana	502	556	996	944	741	783	658	671
Maine	310	359	489	539	363	265	283	243
Maryland	641	843	1, 236	1, 183	729	833	1, 073	1, 110
Massachusetts	1, 740	2, 192	3, 046	2, 896	2, 615	2, 305	2, 506	2, 800
Michigan	1, 004	1, 143	2, 067	2, 159	1, 206	1, 835	1, 817	2, 184
Minnesota	810	1, 105	2, 314	1, 731	1, 414	1, 446	1, 436	1, 536
Mississippi	224	314	447	294	469	234	187	280
Missouri	694	863	1, 544	1, 330	1, 090	1, 199	1, 411	1, 414
Montana	219	261	332	296	216	280	256	217
Nebraska	332	379	488	575	534	509	502	627
Nevada	—	—	—	—	—	—	26	31
New Hampshire	190	273	396	360	341	264	281	281
New Jersey	1, 145	1, 279	2, 122	2, 036	1, 236	1, 311	1, 506	1, 584
New Mexico	20	31	54	60	23	35	61	50
New York	2, 938	3, 646	5, 913	5, 421	4, 905	4, 973	5, 150	5, 898
North Carolina	532	739	1, 347	1, 330	1, 151	1, 222	1, 258	1, 172
North Dakota	209	296	433	484	355	371	342	333
Ohio	1, 618	2, 192	3, 813	3, 385	2, 398	2, 851	3, 008	3, 237
Oklahoma	248	300	603	562	349	361	437	376
Oregon	191	292	693	658	363	353	383	398
Pennsylvania	2, 975	3, 444	5, 827	5, 581	4, 694	4, 901	5, 592	4, 823
Rhode Island	207	211	398	237	223	242	284	362
South Carolina	290	367	752	637	465	583	572	359
South Dakota	192	229	466	411	318	381	328	323
Tennessee	477	704	1, 231	1, 124	722	792	866	647
Texas	1, 028	1, 338	2, 191	1, 852	1, 099	1, 394	1, 055	1, 072
Utah	145	192	468	371	282	267	310	358
Vermont	153	197	314	259	142	130	181	186
Virginia	453	673	1, 131	1, 150	953	940	999	1, 000
Washington	549	810	1, 062	1, 197	746	740	599	893
West Virginia	341	515	1, 042	918	589	492	474	504
Wisconsin	767	786	1, 285	1, 196	996	1, 162	1, 216	1, 441
Wyoming	12	18	38	31	—	33	34	70
Puerto Rico	. . .	. . .	. . .	. . .	. . .	231	275	393

[1] 12-month period ending June 30 of the year stated.

[2] 12-month period ending Aug. 31 of the year stated.

SOURCES: Tibbitts, Helen G., and Levine, Eugene. Health Manpower Source Book, Section 2—Nursing Personnel. Public Health Service Pub. No. 263, Washington, U.S. Government Printing Office, 1953, p. 38.
American Nurses' Association. Facts About Nursing: A Statistical Summary. New York, The Association, Annual eds.: 1957, p. 70; and 1961, p. 86.
National League for Nursing. State-Approved Schools of Professional Nursing. New York, The League, 1965, p. 99.

Table 21.—Graduations from schools offering initial programs in professional nursing, by region and State: selected years 1900–1964

Region and State	Academic year [1] ending June 30					Calendar year			Academic year [2] ending August 31	
	1900	1910	1920	1931	1940	1945	1950	1955	1960	1964
United States	3, 546	7, 622	14, 980	25, 971	22, 670	31, 721	25, 790	28, 603	29, 895	35, 050
Northeast	2, 033	3, 678	6, 378	10, 112	8, 113	11, 609	9, 320	10, 682	10, 682	12, 983
North Central	1, 080	2, 281	4, 901	8, 355	7, 598	10, 349	8, 378	9, 751	10, 346	11, 857
South	266	978	2, 245	4, 920	4, 978	7, 214	6, 019	5, 660	6, 076	6, 945
West	167	685	1, 456	2, 584	1, 981	2, 549	2, 073	2, 510	2, 791	3, 265
Alabama	8	27	104	267	295	288	275	222	256	328
Alaska	—	—	—	—	—	—	—	—	—	—
Arizona	—	—	7	32	49	71	78	105	65	179
Arkansas	—	24	70	136	80	138	168	147	140	141
California	109	376	806	1, 324	704	998	852	1, 138	1, 234	1, 613
Colorado	25	95	159	305	216	326	151	216	235	264
Connecticut	63	145	281	533	477	714	554	652	690	765
Delaware	1	10	14	58	88	149	127	114	79	116
District of Columbia	60	96	163	252	189	248	165	120	187	224
Florida	3	11	50	209	183	212	224	260	337	578
Georgia	7	78	186	327	231	629	435	337	459	636
Hawaii	—	—	—	. . .	. . .	. . .	. . .	90	102	70
Idaho	—	5	29	65	98	111	103	101	53	70
Illinois	318	546	1, 338	1, 818	1, 625	2, 459	1, 691	2, 003	1, 932	2, 212
Indiana	45	141	279	504	564	738	588	672	787	810
Iowa	61	183	383	615	469	666	494	676	695	735
Kansas	26	75	176	444	504	496	407	483	428	478
Kentucky	26	58	99	251	237	267	288	320	327	301
Louisiana	25	82	145	291	293	455	539	306	321	371
Maine	31	79	144	276	228	321	220	188	176	203
Maryland	59	145	241	520	504	722	449	542	573	659
Massachusetts	498	788	1, 311	1, 663	1, 276	1, 731	1, 500	1, 668	1, 716	1, 893
Michigan	279	286	444	928	668	1, 043	811	994	1, 186	1, 301
Minnesota	106	198	529	988	765	906	940	1, 075	1, 027	1, 251
Mississippi	—	22	73	149	212	200	210	147	114	137
Missouri	69	165	402	576	562	669	604	729	855	919
Montana	—	25	87	128	168	174	151	132	224	116
Nebraska	10	92	176	274	275	302	308	312	316	413
Nevada	—	—	2	—	—	—	—	—	—	7
New Hampshire	48	70	124	254	135	213	153	175	152	189
New Jersey	145	192	330	848	932	1, 078	810	928	923	1, 136
New Mexico	—	3	1	5	19	16	11	12	31	48
New York	721	1, 320	2, 368	3, 172	2, 345	3, 579	2, 824	3, 331	3, 405	4, 518
North Carolina	—	55	188	391	434	813	724	636	677	732
North Dakota	—	14	108	186	194	294	209	238	199	199
Ohio	111	450	655	1, 358	1, 329	1, 829	1, 526	1, 672	1, 905	2, 336
Oklahoma	—	4	96	183	204	300	209	217	237	187
Oregon	12	39	91	181	178	179	178	189	255	261
Pennsylvania	477	972	1, 543	2, 625	2, 438	3, 619	3, 016	3, 497	3, 327	3, 768
Rhode Island	46	69	221	667	136	215	143	171	209	370
South Carolina	8	54	98	221	225	341	307	296	317	281
South Dakota	—	26	62	153	148	212	187	177	244	280
Tennessee	8	42	131	351	358	479	384	491	496	487
Texas	8	104	269	615	810	1, 018	639	598	659	747
Utah	10	21	76	113	121	167	102	135	156	149
Vermont	4	43	56	74	146	139	100	72	84	141
Virginia	51	93	209	442	349	569	517	583	604	718
Washington	9	110	177	396	401	495	447	392	426	469
West Virginia	2	73	109	257	286	386	359	324	293	302
Wisconsin	55	105	349	511	495	735	613	720	772	923
Wyoming	2	11	21	35	27	12	—	—	10	19
Puerto Rico	—	—	—	. . .	. . .	. . .	. . .	126	218	209

[1] 12-month period ending June 30 of the year stated.

[2] 12-month period ending Aug. 31 of the year stated.

SOURCES: Tibbitts, Helen G., and Levine, Eugene. Health Manpower Source Book, Section 2—Nursing Personnel. Public Health Service Pub. No. 263. Washington, U.S. Government Printing Office, 1953, p. 39.

American Nurses' Association. Facts About Nursing: A Statistical Summary. New York, The Association, Annual eds., 1957, p. 73; and 1961, p. 88.

National League for Nursing. State-Approved Schools of Professional Nursing. New York, The League, 1965, p. 99.

Table 22.—Students entering nursing schools, in relation to female population age 17 and to female high school graduates: 1952–1964

Year of admission to nursing school	Female population age 17 [1]	Admissions to nursing schools		Female high school graduates [2]	Admissions to nursing schools [2]	
		Number	Rate per 100 females age 17		Number	Rate per 100 female high school graduates
Calendar:						
1952	1, 092, 000	42, 542	3. 9	630, 000	42, 290	6. 7
1953	1, 091, 000	43, 327	4. 0	628, 000	43, 096	6. 9
1954	1, 100, 000	44, 930	4. 1	667, 000	44, 701	6. 7
Academic:						
1955–56	1, 140, 000	45, 209	4. 0	703, 000	45, 020	6. 4
1956–57	1, 161, 000	45, 255	3. 9	739, 000	45, 058	6. 1
1957–58	1, 163, 000	44, 221	3. 8	750, 000	43, 937	5. 9
1958–59	1, 215, 000	46, 263	3. 8	784, 000	45, 988	5. 9
1959–60	1, 296, 000	49, 166	3. 8	849, 000	48, 919	5. 8
1960–61	1, 478, 000	49, 487	3. 4	966, 000	49, 219	5. 1
1961–62	1, 398, 000	49, 805	3. 6	1, 013, 000	49, 506	4. 9
1962–63	1, 396, 000	49, 521	3. 6	984, 000	49, 228	5. 0
1963–64	1, 389, 000	52, 667	3. 8	991, 000	52, 274	5. 3

[1] Estimates as of July 1 for 50 States, District of Columbia, and Puerto Ricof or all years.
[2] Exclusive of Puerto Rico. High school graduates as of the academic year preceding admission to nursing schools.

SOURCES: U.S. Department of Commerce, Bureau of the Census. Estimates of 17-year-old females as of July 1. Unpublished. Includes Armed Forces overseas.

U.S. Department of Health, Education, and Welfare. Office of Education. Unpublished data on high school graduates, July 1965.

American Nurses' Association. Facts About Nursing: A Statistical Summary. New York, The Association, Annual eds.: 1953, p. 53; 1954, p. 58; 1955–56, p. 79; 1958, p. 73; 1959, p. 74; 1960, p. 73; 1961, p. 86; 1962–63, p. 94; 1964, p. 95; and 1965, p. 85.

National League for Nursing. State-Approved Schools of Professional Nursing. New York, The League, 1965, p. 99.

Table 23.—Male students in schools offering initial programs in professional nursing: enrollments, admissions, graduations [1] 1943–1955, and academic years 1957–1963

Year	Number of programs reporting male enrollments	Enrollments	Admissions	Graduations
Calendar:				
1943	80	379	. . .	. . .
1944	69	. . .	. . .	. . .
1945	. . .	169	42	28
1946	68	72	. . .	36
1947	. . .	. . .	334	42
1948	115	455	470	28
1949	123	719	398	136
1950	183	900	508	205
1951	181	1, 023	384	248
1952	113	967	361	271
1953	. . .	883	332	335
1954	. . .	843	400	236
1955	. . .	[2] 823	459	230
Academic:				
1956–57	. . .	1, 037	484	224
1959–60	. . .	1, 403	690	287
1962–63	361	1, 771	856	393

[1] Admissions and graduations are for calendar years through 1955; acedamic years 1956–1963. Enrollments as of Jan. 1 through 1955; as of Oct. 15 in 1957, 1960, and 1963.
[2] Enrollments Oct. 15, 1955, were 913.

SOURCE: American Nurses' Association. Facts About Nursing: A Statistical Summary. New York, The Association, Annual eds.: 1945, p. 35; 1950, pp. 38 and 46; 1964, p. 100; and 1965, p. 90.

Table 24.—Negro students in schools offering initial programs in professional nursing: enrollments, admissions, graduations[1] 1943–1955, and academic years 1957–1963

Year	Number of programs reporting nonwhite enrollments	Enrollments	Admissions	Graduations
Calendar:				
1943	46	2, 047	. . .	. . .
1944	49	1, 453	. . .	549
1945	. . .	. . .	821	520
1946	76	2, 281	. . .	540
1947	. . .	. . .	1, 001	592
1948	119	2, 255	1, 262	597
1949	149	2, 504	1, 383	507
1950	207	3, 076	1, 200	583
1951	236	2, 971	1, 350	782
1952	273	3, 229	[2] 1, 964	[2] 1, 035
1953	323	[2] 4, 156	[2] 1, 928	[2] 1, 045
1954	. . .	[2] 4, 355	[2] 1, 843	[2] 1, 061
1955	. . .	[2] [3] 4, 480	[2] 2, 119	[2] 1, 151
Academic:				
1956–57	. . .	[2] 5, 112	[2] 1, 976	[2] 1, 151
1959–60	543	3, 700	1, 597	1, 090
1962–63	443	3, 247	1, 456	1, 081

[1] Admissions and graduations are for calendar years through 1955; academic years 1956–1963. Enrollments as of Jan. 1 through 1955; as of Oct. 15 in 1957, 1960, and 1963.

[2] Includes all nonwhite students.

[3] 4,811 on Oct. 14, 1955.

SOURCES: American Nurses' Association. Facts About Nursing: A Statistical Summary. New York, The Association, Annual eds.: 1944, p. 35; 1950, p. 47; 1954, p. 62; 1959, p. 79; 1962–63, p. 99; and 1965, pp. 92–93.

Tate, Barbara L. and Carnegie, M. Elizabeth: Negro Admissions, Enrollments, and Graduations—1963. Nursing Outlook, 13:2, Feb. 1965, pp. 61–63.

Table 25.—Number of initial programs in professional nursing, by type of program: 1950–1964

Year	Number of schools[1]	Number of programs[2]			
		Total	Diploma	Associate degree	Baccalaureate[3]
January:					
1950	1, 190	1, 314	1, 118	1	195
1952	1, 155	1, 263	1, 065	[4] . . .	198
1953	1, 125	1, 236	1, 017	21	198
1954	1, 124	1, 237	992	30	215
1955	1, 129	1, 161	981	34	146
October:					
1955	1, 125	1, 141	967	19	155
1956	1, 115	1, 137	956	20	161
1957	1, 118	1, 138	944	28	166
1958	1, 125	1, 145	935	38	172
1959	1, 119	1, 137	918	48	171
1960	1, 123	1, 137	908	57	172
1961	1, 118	1, 126	883	69	174
1962	1, 128	1, 136	874	84	178
1963	1, 142	1, 148	860	105	183
1964	1, 153	1, 158	840	130	188

[1] All years include Hawaii and Puerto Rico. Numbers include only State approved schools with students enrolled.

[2] Some schools offer more than one program.

[3] Includes initial programs leading to a master's degree.

[4] Included with diploma programs.

SOURCES: National League of Nursing Education. State-approved Schools of Nursing, 1950. New York, The League, 77 pp.

American Nurses' Association. Facts About Nursing: A Statistical Summary. New York, The Association, Annual eds: 1952, p. 62; 1953, p. 64; 1954, p. 68; 1955–56, p. 89; 1957, p. 83; 1958, p. 86; 1959, p. 87; and 1865, p. 102.

National League for Nursing. State-Approved Schools of Professional Nursing. New York, The League, 1965, p. 99.

Table 26.—Student enrollment in schools offering initial programs in professional nursing, by type of program: 1946–1964 (includes 49 States, District of Columbia, and Puerto Rico, except as noted; Alaska has no professional nursing program.)

Year	All programs	Types of basic professional nursing program			Percent enrolled in baccalaureate program
		Diploma	Associate degree	Baccalaureate[1]	
On January 1:					
1946	[2] 128,828	121,654	. . .	7,174	5.6
1947	[2] 106,900	101,425	. . .	5,475	5.1
1948	[2] 91,643	85,597	. . .	6,046	6.6
1949	[2] 88,817	82,182	. . .	6,635	7.5
1950	[2] 97,903	89,420	[3] . . .	8,483	8.7
1951	[2] 102,509	93,325	[3] . . .	9,184	9.0
1952	[2] 101,809	90,888	[3] . . .	10,921	10.7
1953	102,019	89,308	[3] . . .	12,711	12.5
1954	103,019	86,902	1,463	14,654	14.2
1955	107,572	91,076	1,507	14,989	13.9
On October 15:					
1955	114,423	95,902	1,084	17,437	15.2
1956	114,674	94,920	1,132	18,622	16.2
1957	112,989	92,989	1,360	18,640	16.5
1958	113,518	92,419	1,904	19,195	16.9
1959	115,057	92,899	2,345	19,813	17.2
1960	118,849	94,812	3,254	20,783	17.5
1961	123,012	96,606	3,860	22,546	18.3
1962	123,861	95,278	4,927	23,656	19.1
1963	124,744	93,271	6,356	25,117	20.1
1964	129,269	93,089	8,513	27,667	21.4

[1] Includes a few students enrolled in initial programs leading to a master's degree.
[2] Excludes students enrolled in schools in Hawaii and Puerto Rico.
[3] Included with diploma enrollments.

SOURCE: American Nurses' Association. Facts About Nursing: A Statistical Summary. New York, The Association, Annual eds.: 1953, p. 49; 1954, p. 55; 1955–56, p. 76, and 1965, p. 82.

Table 27.—Admissions to schools offering initial programs in professional nursing, by type of program: 1952–1964 (includes Hawaii and Puerto Rico for all years)

Year	Total admissions	Type of program		
		Diploma	Associate degree	Baccalaureate [1]
Calendar Year:				
1952	42, 542	37, 140	[2] . . .	5, 402
1953	43, 327	36, 947	609	5, 771
1954	44, 930	38, 106	741	6, 083
1955	46, 498	38, 884	629	6, 985
Academic Year:				
1955–56	45, 209	37, 763	559	6, 887
1956–57	45, 255	37, 571	578	7, 106
1957–58	44, 221	36, 402	953	6, 866
1958–59	46, 263	37, 722	1, 266	7, 275
1959–60	49, 166	40, 013	1, 598	7, 555
1960–61	49, 487	38, 702	2, 085	8, 700
1961–62	49, 805	38, 257	2, 504	9, 044
1962–63	49, 521	36, 434	3, 490	9, 597
1963–64	52, 667	37, 936	4, 461	10, 270

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[1] Prior to 1957–58, baccalaureate figures include a few students admitted to initial programs leading to a master's degree.
[2] Included with diploma admissions.

SOURCE: American Nurses' Association. Facts About Nursing: A Statistical Summary. New York, The Association, Annual eds.: 1954, p. 60; 1955–56, p. 80; 1957, p. 70; and 1965, p. 84.

Table 28.—Graduations from schools offering initial programs in professional nursing, by type of program: 1952–1964 (includes Hawaii and Puerto Rico for all years)

Year	Total	Type of program		
		Diploma	Associate degree	Baccalaureate [1]
Calendar year:				
1952	29, 016	26, 720	298	1, 998
1953	29, 308	26, 824	260	2, 224
1954	28, 539	25, 797	344	2, 398
1955	28, 729	25, 826	199	2, 704
Academic year:				
1955–56	30, 236	26, 828	252	3, 156
1956–57	29, 933	26, 141	276	3, 516
1957–58	30, 410	26, 314	425	3, 671
1958–59	30, 312	25, 907	462	3, 943
1959–60	30, 113	25, 188	789	4, 136
1960–61	30, 267	25, 311	917	4, 039
1961–62	31, 186	25, 727	1, 159	4, 300
1962–63	32, 398	26, 438	1, 479	4, 481
1963–64	35, 259	28, 238	1, 962	5, 059

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[1] Prior to 1958–59, baccalaureate figures include a few students who were granted master's degrees from an initial program.

SOURCES: National League for Nursing, Evaluation and Guidance Service: Admissions and Graduations—1952, Nursing Outlook, 1:6, June 1953, p. 360. American Nurses' Association. Facts About Nursing: A Statistical Summary. New York, The Association, Annual eds.: 1954, p. 60; 1955–56, p.80; 1957, p. 73; and 1965, p. 88.

Table 29.—Number and percent of initial professional nursing programs accredited by the National League for Nursing: 1953–1965

Year	Total			Diploma			Associate degree			Baccalaureate [1]		
	All programs	Accredited		Total	Accredited		Total	Accredited		Total	Accredited	
		Number	Percent		Number	Percent		Number	Percent		Number	Percent
April:												
1953	1, 162	218	18. 8	1, 036	167	16. 1	—	—	—	126	51	40. 5
1954	1, 165	245	21. 0	1, 024	192	18. 8	—	—	—	141	53	37. 6
June:												
1955	1, 157	261	22. 6	1, 007	204	20. 3	—	—	—	150	57	38. 0
January:												
1956	1, 141	283	24. 8	967	221	22. 9	19	1	5. 3	155	61	39. 4
1957	1, 138	343	30. 1	956	278	29. 1	20	1	5. 0	162	64	39. 5
1958	1, 139	439	38. 5	944	363	38. 5	28	2	7. 1	167	74	44. 3
1959	1, 145	504	44. 0	935	422	45. 1	38	3	7. 9	172	79	45. 9
1960	1, 137	583	51. 3	918	490	53. 4	48	5	10. 4	171	88	51. 5
1961	1, 137	629	55. 3	908	524	57. 7	57	6	10. 5	172	99	57. 6
1962	1, 126	673	59. 8	883	555	62. 9	69	6	8. 7	174	112	64. 4
1963	1, 136	688	60. 6	874	564	64. 5	84	5	6. 0	178	119	66. 9
1964	1, 148	707	61. 6	860	573	66. 6	105	5	4. 8	183	129	70. 5
1965	1, 158	708	61. 1	840	569	67. 7	130	5	3. 8	188	134	71. 3

[1] Includes initial programs leading to a master's degree.

SOURCES: American Nurses' Association. Facts About Nursing: A Statistical Summary. New York, The Association, Annual eds.: 1953, p. 67; 1954, p. 71; 1955–56, p. 92; 1957, p. 85; 1958, p. 89; 1959, p. 90; 1960, p. 88; 1961, p. 88; 1961, p. 108; 1962–63, p. 110; 1964, p. 113; and 1965, p. 106.
National League for Nursing. State Approved Schools of Professional Nursing. New York, The League, 1965, p. 100.

Table 30.—Number and percent of students enrolled in initial programs in professional nursing accredited by the National League for Nursing: 1953–1964

Year	Total			Diploma			Associate degree			Baccalaureate		
	Total enrollment	Enrollment in accredited programs		Total enrollment	Enrollment in accredited programs		Total enrollment	Enrollment in accredited programs		Total enrollment	Enrollment in accredited programs	
		Number	Percent		Number	Percent		Number	Percent		Number	Percent
January:												
1953	102, 019	31, 912	31. 3	89, 308	24, 264	27. 2	—	—	—	12, 711	7, 648	60. 2
1954	103, 019	36, 598	35. 5	88, 365	28, 130	31. 8	—	—	—	14, 654	8, 468	57. 8
1955	107, 572	39, 639	36. 8	92, 583	31, 087	33. 6	—	—	—	14, 989	8, 552	57. 1
October:												
1955	114, 423	44, 673	39. 0	95, 902	34, 700	36. 2	1, 084	13	1. 2	17, 437	9, 960	57. 1
1956	114, 674	51, 523	44. 9	94, 920	40, 999	43. 2	1, 132	30	2. 7	18, 622	10, 494	56. 4
1957	112, 989	60, 492	53. 5	92, 989	49, 279	53. 0	1, 360	47	3. 5	18, 640	11, 166	59. 9
1958	113, 518	65, 730	57. 9	92, 419	53, 613	58. 0	1, 904	134	7. 0	19, 195	11, 983	62. 4
1959	115, 057	74, 617	64. 9	92, 899	60, 878	65. 5	2, 345	319	13. 6	19, 813	13, 420	67. 7
1960	118, 849	82, 312	69. 3	94, 812	66, 768	70. 4	3, 254	402	12. 4	20, 783	15, 142	72. 9
1961	123, 012	90, 320	73. 4	96, 606	71, 910	74. 4	3, 860	449	11. 6	22, 546	17, 961	79. 7
1962	123, 861	92, 545	74. 7	95, 278	72, 538	76. 1	4, 927	514	10. 4	23, 656	19, 493	82. 4
1963	124, 744	93, 587	75. 0	93, 271	71, 880	77. 1	6, 356	528	8. 3	25, 117	21, 179	84. 3
1964	129, 269	97, 439	75. 4	93, 089	72, 970	78. 4	8, 513	365	4. 3	27, 667	24, 104	87. 1

SOURCES: American Nurses' Association. Facts About Nursing: A Statistical Summary. New York, The Association, Annual eds.: 1953, p. 67; 1954 p. 71; 1955–56, p. 92; 1957, p. 85; 1958, p. 89; 1959, p. 90; 1960, p. 88; 1961, p. 108; 1962-63, p. 110; 1964, p. 113; and 1965, p. 106.
National League for Nursing. State Approved Schools of Professional Nursing. New York, The League, 1965, p. 100.

Table 31.—Percent of students admitted to schools offering initial programs in professional nursing who were graduated, by type of program: 1956–1964 (includes 49 States, District of Columbia, and Puerto Rico; Alaska has no professional nursing program).

Year of graduation	Baccalaureate			Diploma			Associate degree		
	Graduations	Admissions[1] 4 years prior	Completion rate	Graduations	Admissions[1] 3 years prior	Completion rate	Graduations	Admissions[1] 2 years prior	Completion rate
1956–57	3, 478	5, 707	60. 9	26, 141	38, 106	68. 6	276	559	49. 4
1957–58	3, 650	6, 017	60. 7	26, 314	37, 763	69. 7	425	578	73. 5
1958–59	3, 943	6, 833	57. 7	25, 907	37, 571	69. 0	462	953	48. 5
1959–60	4, 136	7, 094	58. 3	25, 188	36, 402	69. 2	789	1, 266	62. 3
1960–61	4, 039	6, 866	58. 8	25, 311	37, 722	67. 1	917	1, 598	57. 4
1961–62	4, 300	7, 275	59. 1	25, 727	40, 013	64. 3	1, 159	2, 085	55. 6
1962–63	4, 481	7, 555	59. 3	26, 438	38, 702	68. 3	1, 479	2, 504	59. 1
1963–64	5, 059	8, 700	58. 1	28, 238	38, 257	73. 8	1, 962	3, 490	56. 2

[1] All data on admissions before 1956 are for calendar year.

SOURCES: American Nurses' Association. Facts About Nursing: A Statistical Summary. New York, The Association, Annual eds.: 1954, p. 60; 1955, p. 80; 1957, p. 71; and 1965, pp. 84 and 88.
Completion rates computed by the Manpower Analysis and Resources Branch, Division of Nursing, U.S. Public Health Service.

Table 32.—Students enrolled in schools offering initial programs in professional nursing, by type of program, by region and State: Oct. 15, 1957 and 1964

Region and State	Total		Diploma		Associate degree		Baccalaureate	
	1957	1964	1957	1964	1957	1964	1957	1964
United States	112, 479	128, 429	92, 479	92, 308	1, 360	8, 513	[1] 18, 640	27, 608
Northeast	39, 164	45, 012	34, 427	36, 166	347	2, 450	[1] 4, 390	6, 396
North Central	38, 403	41, 741	32, 445	32, 529	141	1, 220	5, 817	7, 992
South	24, 157	27, 429	19, 071	18, 298	257	1, 736	4, 829	7, 395
West	10, 755	14, 247	6, 536	5, 315	615	3, 107	3, 604	5, 825
Alabama	965	1, 397	770	1, 040	—	—	195	357
Alaska	—	—	—	—	—	—	—	—
Arizona	535	968	450	357	—	132	85	479
Arkansas	625	535	551	508	—	—	74	27
California	4, 485	6, 770	2, 862	2, 180	467	2, 291	1, 156	2, 299
Colorado	1, 110	1, 320	619	571	—	106	491	643
Connecticut	2, 538	2, 647	2, 124	2, 114	—	31	[1] 414	502
Delaware	343	394	343	293	—	—	—	101
District of Columbia	633	972	334	582	—	—	299	390
Florida	1, 343	2, 291	895	883	133	738	315	670
Georgia	1, 700	2, 457	1, 521	2, 059	39	121	140	277
Hawaii	405	392	264	169	—	21	141	202
Idaho	266	259	148	66	70	114	48	79
Illinois	7, 209	7, 722	6, 836	6, 662	—	120	373	940
Indiana	2, 893	3, 216	2, 492	2, 348	—	217	401	651
Iowa	2, 742	2, 461	2, 305	2, 044	—	35	437	382
Kansas	1, 578	1, 507	1, 447	1, 383	—	—	131	124
Kentucky	1, 304	1, 413	1, 187	907	—	99	117	407
Louisiana	1, 394	1, 592	832	757	—	37	562	798
Maine	593	654	578	567	—	—	15	87
Maryland	2, 184	2, 860	1, 665	2, 053	—	—	519	807
Massachusetts	6, 180	7, 189	5, 625	5, 792	26	259	529	1, 138
Michigan	4, 402	5, 090	3, 167	3, 040	141	432	1, 094	1, 618
Minnesota	3, 756	3, 787	2, 829	2, 739	—	204	927	844
Mississippi	467	603	389	316	—	174	78	113
Missouri	3, 095	3, 436	2, 793	2, 786	—	119	302	531
Montana	655	551	386	234	—	—	269	317
Nebraska	1, 229	1, 632	1, 001	1, 368	—	—	228	264
Nevada	16	86	—	—	—	—	16	86
New Hampshire	631	733	601	627	—	—	30	106
New Jersey	3, 314	3, 991	3, 151	3, 634	76	131	87	226
New Mexico	111	148	77	75	—	—	34	73
New York	12, 479	15, 201	9, 658	10, 310	233	1, 750	2, 588	3, 141
North Carolina	2, 901	2, 995	2, 242	2, 040	—	70	659	885
North Dakota	831	825	709	604	—	—	122	221
Ohio	6, 871	7, 920	5, 842	6, 748	—	60	1, 029	1, 112
Oklahoma	783	793	705	612	—	40	78	141
Oregon	857	987	618	644	—	—	239	343
Pennsylvania	12, 308	13, 078	11, 836	12, 125	12	187	460	766
Rhode Island	758	1, 022	624	763	—	—	134	259
South Carolina	1, 246	1, 053	1, 190	834	—	51	56	168
South Dakota	859	875	638	542	—	33	221	300
Tennessee	1, 972	1, 774	1, 497	1, 308	—	43	475	423
Texas	2, 919	2, 654	2, 080	1, 366	—	172	839	1, 116
Utah	630	658	242	207	78	215	310	236
Vermont	363	497	230	234	—	92	133	171
Virginia	2, 217	2, 399	1, 781	1, 866	85	88	351	445
Washington	1, 617	1, 977	870	812	—	228	747	937
West Virginia	1, 161	1, 247	1, 089	874	—	103	72	270
Wisconsin	2, 938	3, 270	2, 386	2, 265	—	—	552	1, 005
Wyoming	68	131	—	—	—	—	68	131
Puerto Rico	510	840	510	781	—	—	—	59

[1] Includes 24 students enrolled in initial programs leading to a master's degree.

SOURCES: American Nurses' Association. Facts About Nursing: A Statistical Summary. New York, The Association. 1959 ed., p. 72. National League for Nursing. State-Approved Schools of Professional Nursing. New York, The League, 1965, p. 99.

Table 33.—Students admitted to schools offering initial programs in professional nursing, by type of program, by region and State: academic years ending Aug. 31, 1957 and 1964

Region and State	Total		Diploma		Associate degree		Baccalaureate	
	1957	1964	1957	1964	1957	1964	1957	1964
United States	45,058	52,274	37,374	37,571	578	4,461	[1] 7,106	10,242
Northeast	15,306	17,158	13,541	13,956	201	1,226	1,552	1,976
North Central	15,507	17,036	13,303	13,480	45	440	[1] 2,171	3,116
South	9,996	11,609	7,922	7,816	86	1,095	1,988	2,698
West	4,249	6,471	2,608	2,319	246	1,700	1,395	2,452
Alabama	400	617	328	479	—	—	72	138
Alaska	—	—	—	—	—	—	—	—
Arizona	199	547	199	219	—	76	—	252
Arkansas	265	208	226	195	—	—	39	13
California	1,744	3,066	1,116	954	187	1,293	441	819
Colorado	412	525	191	245	—	30	221	250
Connecticut	1,008	981	873	799	—	14	135	168
Delaware	147	203	147	180	—	—	—	23
District of Columbia	222	339	113	236	—	—	109	103
Florida	612	1,449	432	545	—	637	180	267
Georgia	794	1,023	648	866	16	44	130	113
Hawaii	143	168	108	83	—	—	35	85
Idaho	84	148	45	31	23	73	16	44
Illinois	2,864	3,112	2,785	2,706	—	38	79	368
Indiana	1,205	1,061	1,036	715	—	89	169	257
Iowa	1,102	978	944	815	—	—	158	163
Kansas	631	790	585	726	—	—	46	64
Kentucky	508	579	482	436	—	14	26	129
Louisiana	610	671	345	308	—	—	265	363
Maine	243	243	243	216	—	—	—	27
Maryland	859	1,110	691	816	—	—	168	294
Massachusetts	2,357	2,800	2,177	2,386	—	57	180	357
Michigan	1,869	2,184	1,389	1,357	45	242	435	585
Minnesota	1,387	1,536	1,096	1,223	—	—	291	313
Mississippi	218	280	171	174	—	63	47	43
Missouri	1,265	1,414	1,127	1,156	—	53	138	205
Montana	229	217	143	87	—	—	86	130
Nebraska	478	627	391	529	—	—	87	98
Nevada	—	31	—	—	—	—	—	31
New Hampshire	271	281	261	247	—	—	10	34
New Jersey	1,396	1,584	1,287	1,438	59	102	50	44
New Mexico	40	50	40	27	—	—	—	23
New York	4,768	5,898	3,716	4,021	138	877	914	1,000
North Carolina	1,098	1,172	887	815	—	40	211	317
North Dakota	333	333	271	238	—	—	62	95
Ohio	2,901	3,237	2,513	2,847	—	—	[1] 388	390
Oklahoma	368	376	314	278	—	30	54	68
Oregon	379	398	260	255	—	—	119	143
Pennsylvania	4,833	4,823	4,658	4,468	4	117	171	238
Rhode Island	290	362	241	291	—	—	49	71
South Carolina	540	359	515	273	—	28	25	58
South Dakota	336	323	255	180	—	18	81	125
Tennessee	754	647	626	482	—	22	128	143
Texas	1,224	1,072	865	637	—	99	359	336
Utah	301	358	117	99	36	115	148	144
Vermont	140	186	85	90	—	59	55	37
Virginia	977	1,000	750	716	70	83	157	201
Washington	685	893	389	319	—	113	296	461
West Virginia	400	504	382	380	—	35	18	89
Wisconsin	1,136	1,441	911	988	—	—	225	453
Wyoming	33	70	—	—	—	—	33	70
Puerto Rico	197	393	197	365	—	—	—	28

[1] Includes 12 students admitted to initial programs leading to a master's degree.

SOURCES: American Nurses' Association. Facts About Nursing: A Statistical Summary. New York, The Association. 1959 ed., p. 74. National League for Nursing. State-Approved Schools of Professional Nursing. New York, The League, 1965, p. 99.

Table 34.—Students graduated from schools offering initial programs in professional nursing, by type of program, by region and State: academic years ending Aug. 31, 1957 and 1964

Region and State	Total		Diploma		Associate degree		Baccalaureate	
	1957	1964	1957	1964	1957	1964	1957	1964
United States	29, 775	35, 050	25, 983	28, 035	276	1, 962	[1] 3, 516	5, 053
Northeast	11, 120	12, 983	10, 026	11, 203	117	503	[1] 977	1, 277
North Central	10, 079	11, 857	8, 902	9, 976	28	222	1, 149	1, 659
South	6, 076	6, 945	5, 266	5, 337	12	345	798	1, 263
West	2, 500	3, 265	1, 789	1, 519	119	892	592	854
Alabama	243	328	216	277	—	—	27	51
Alaska	—	—	—	—	—	—	—	—
Arizona	110	179	110	97	—	39	—	43
Arkansas	155	141	148	131	—	—	7	10
California	1, 155	1, 613	863	615	94	677	198	321
Colorado	249	264	168	161	—	24	81	79
Connecticut	764	765	654	665	—	—	[1] 110	100
Delaware	92	116	92	116	—	—	—	—
District of Columbia	141	224	87	156	—	—	54	68
Florida	334	578	266	239	—	172	68	167
Georgia	388	636	339	565	—	34	49	37
Hawaii	97	70	78	46	—	—	19	24
Idaho	61	70	54	16	—	46	7	8
Illinois	1, 867	2, 212	1, 816	2, 033	—	14	51	165
Indiana	778	810	706	644	—	35	72	131
Iowa	769	735	680	645	—	—	89	90
Kansas	438	478	383	424	—	—	55	54
Kentucky	351	301	337	251	—	—	14	50
Louisiana	348	371	238	264	—	—	110	107
Maine	188	203	179	184	—	—	9	19
Maryland	522	659	439	564	—	—	83	95
Massachusetts	1, 786	1, 893	1, 690	1, 694	—	27	96	172
Michigan	1, 142	1, 301	919	922	28	147	195	232
Minnesota	1, 014	1, 251	820	992	—	—	194	259
Mississippi	125	137	123	102	—	19	2	16
Missouri	746	919	681	808	—	19	65	92
Montana	172	116	130	58	—	31	42	27
Nebraska	321	413	281	347	—	—	40	66
Nevada	—	7	—	—	—	—	—	7
New Hampshire	192	189	183	172	—	—	9	17
New Jersey	876	1, 136	838	1, 021	20	71	18	44
New Mexico	19	48	19	26	—	—	—	22
New York	3, 284	4, 518	2, 616	3, 471	94	347	574	700
North Carolina	804	732	727	551	—	21	77	160
North Dakota	228	199	209	147	—	—	19	52
Ohio	1, 835	2, 336	1, 599	2, 006	—	—	236	330
Oklahoma	236	187	220	166	—	—	16	21
Oregon	133	261	77	150	—	—	56	111
Pennsylvania	3, 775	3, 768	3, 686	3, 581	3	30	86	157
Rhode Island	143	370	118	339	—	—	25	31
South Carolina	324	281	313	245	—	15	11	21
South Dakota	194	280	162	233	—	7	32	40
Tennessee	396	487	323	404	—	16	73	67
Texas	599	747	487	477	—	34	112	236
Utah	129	149	55	66	25	33	49	50
Vermont	112	141	62	76	—	28	50	37
Virginia	688	718	586	591	12	14	90	113
Washington	366	469	235	284	—	42	131	143
West Virginia	330	302	325	238	—	20	5	44
Wisconsin	747	923	646	775	—	—	101	148
Wyoming	9	19	—	—	—	—	9	19
Puerto Rico	158	209	158	203	—	—	—	6

[1] Includes 38 students who were granted master's degrees from an initial program.

SOURCES: American Nurses' Association. Facts About Nursing: A Statistical Summary. New York, The Association, 1959 ed., p. 77. National League for Nursing. State-Approved Schools of Professional Nursing. New York, The League, 1965, p. 99.

Table 35.—Graduate nurse students enrolled full time and part time[1] in colleges and universities, by region and State: 1957, 1963, and 1964

	Total			Baccalaureate			Master's degree and above		
	1957	1963	1964	1957	1963	1964	1957	1963	1964
Unites States	12, 321	11, 913	12, 273	9, 967	8, 978	9, 280	[2] 2, 354	[3] 2, 935	[4] 2, 993
Northeast	6, 530	5, 327	5, 422	5, 265	3, 994	4, 122	[2] 1, 265	[3] 1, 333	[4] 1, 300
North Central	2, 890	2, 908	2, 898	2, 339	2, 346	2, 273	551	562	625
South	1, 900	1, 784	1, 937	1, 596	1, 267	1, 361	304	517	576
West	1, 001	1, 894	2, 016	767	1, 371	1, 524	234	523	492
Alabama	96	71	99	79	60	88	17	11	11
Alaska	—	—	—	—	—	—	—	—	—
Arizona	—	105	115	—	105	115	—	—	—
Arkansas	5	—	1	5	—	1	—	—	—
California	492	982	1, 113	417	775	885	75	207	228
Colorado	181	214	200	108	111	121	73	103	79
Connecticut	59	183	234	39	152	206	20	31	28
Delaware	—	—	—	—	—	—	—	—	—
District of Columbia	347	377	399	169	131	153	178	246	246
Florida	86	67	93	83	67	77	3	—	16
Georgia	86	79	95	70	42	49	16	37	46
Hawaii	15	10	14	15	10	14	—	—	—
Idaho	—	—	2	—	—	2	—	—	—
Illinois	554	541	613	410	488	527	144	53	86
Indiana	265	218	193	218	176	152	47	42	41
Iowa	91	83	128	85	57	102	6	26	26
Kansas	38	49	41	38	49	41	—	—	—
Kentucky	93	85	101	93	85	101	—	—	—
Louisiana	139	99	103	139	99	103	—	—	—
Maine	—	—	—	—	—	—	—	—	—
Maryland	526	549	572	508	399	390	18	150	182
Massachusetts	982	1, 012	1, 041	833	735	730	149	[3] 277	[4] 311
Michigan	303	351	381	230	212	245	73	139	136
Minnesota	301	163	137	231	84	52	70	79	85
Mississippi	48	16	9	48	16	9	—	—	—
Missouri	444	404	315	359	311	218	85	93	97
Montana	17	48	33	14	29	23	3	19	10
Nebraska	48	161	155	39	161	155	9	—	—
Nevada	—	12	9	—	12	9	—	—	—
New Hampshire	50	55	41	50	55	41	—	—	—
New Jersey	512	233	630	504	221	617	8	12	13
New Mexico	—	14	17	—	14	17	—	—	—
New York	3, 730	2, 709	2, 329	2, 779	1, 882	1, 538	[2] 951	[3] 827	[4] 791
North Carolina	79	136	158	50	78	95	29	58	63
North Dakota	—	6	22	—	6	22	—	—	—
Ohio	421	503	534	344	398	421	77	105	113
Oklahoma	—	13	13	—	13	13	—	—	—
Oregon	99	77	62	82	38	35	17	39	27
Pennsylvania	1, 197	1, 129	1, 138	1, 060	943	981	137	[3] 186	[4] 157
Rhode Island	—	6	9	—	6	9	—	—	—
South Carolina	7	30	25	7	30	25	—	—	—
South Dakota	21	28	9	21	28	9	—	—	—
Tennessee	137	24	16	128	21	14	9	3	2
Texas	186	131	146	152	119	136	34	12	10
Utah	38	144	123	38	116	100	—	28	23
Vermont	—	—	—	—	—	—	—	—	—
Virginia	25	81	79	25	81	79	—	—	—
Washington	154	280	324	88	153	199	66	127	125
West Virginia	40	26	28	40	26	28	—	—	—
Wisconsin	404	401	370	364	376	329	40	25	41
Wyoming	5	8	4	5	8	4	—	—	—
Puerto Rico	56	117	95	56	117	95	—	—	—

[1] Detail of full time and part-time enrollment is given in Sources below.

[2] Includes 90 doctoral students in New York.

[3] Includes 169 doctoral students; 12 in Massachusetts, 135 in New York, and 22 in Pennsylvania.

[4] Includes 157 doctoral students; 13 in Massachusetts, 125 in New York, and 19 in Pennsylvania.

SOURCES: American Nurses' Association. Facts About Nursing: A Statistical Summary. New York, The Association. Annual eds.: 1959, pp. 94 and 96; and 1965, pp. 111 and 113.

National League for Nursing, New York, New York. Unpublished data.

Table 36.—Graduate nurse students granted academic degrees in nursing from colleges and universities, by region and State: 1957, 1963, and 1964

Region and State	Total			Baccalaureate			Master's degree and above		
	1957	1963	1964	1957	1963	1964	1957	1963	1964
United States	2, 837	3, 464	3, 714	2, 109	2, 302	2, 413	[1] 728	[2] 1, 162	[3] 1, 301
Northeast	1, 312	1, 498	1, 426	934	975	915	378	[2] 523	[3] 511
North Central	711	855	979	546	657	717	165	198	262
South	416	532	601	310	327	390	106	205	211
West	398	579	708	319	343	391	79	236	317
Alabama	30	34	29	26	28	22	4	6	7
Alaska	—	—	—	—	—	—	—	—	—
Arizona	—	8	15	—	8	15	—	—	—
Arkansas	—	2	—	—	2	—	—	—	—
California	174	280	341	144	158	179	30	122	162
Colorado	90	90	102	70	45	53	20	45	49
Connecticut	10	39	37	6	26	23	4	13	14
Delaware	—	—	—	—	—	—	—	—	—
District of Columbia	112	142	137	48	42	46	64	100	91
Florida	26	37	41	26	37	41	—	—	—
Georgia	24	45	50	14	20	21	10	25	29
Hawaii	11	3	2	11	3	2	—	—	—
Idaho	—	—	—	—	—	—	—	—	—
Illinois	112	117	153	81	111	140	31	6	13
Indiana	59	111	83	40	81	46	19	30	37
Iowa	40	40	44	34	38	36	6	2	8
Kansas	23	15	30	23	15	30	—	—	—
Kentucky	13	14	22	13	14	22	—	—	—
Louisiana	45	14	15	45	14	15	—	—	—
Maine	—	—	—	—	—	—	—	—	—
Maryland	33	75	80	24	29	37	9	46	43
Massachusetts	246	306	320	197	170	197	49	[2] 136	[3] 123
Michigan	80	78	113	48	39	54	32	39	59
Minnesota	113	107	108	80	59	54	33	48	54
Mississippi	2	4	12	2	4	12	—	—	—
Missouri	100	110	129	78	75	93	22	35	36
Montana	7	30	28	7	27	16	—	3	12
Nebraska	19	66	37	18	66	37	1	—	—
Nevada	—	—	3	—	—	3	—	—	—
New Hampshire	9	11	16	9	11	16	—	—	—
New Jersey	47	58	70	43	56	66	4	2	4
New Mexico	—	11	3	—	11	3	—	—	—
New York	734	812	724	445	495	411	[1] 289	[2] 317	[3] 313
North Carolina	43	45	91	32	29	53	11	16	38
North Dakota	—	1	2	—	1	2	—	—	—
Ohio	117	133	210	99	105	155	18	28	55
Oklahoma	—	3	3	—	3	3	—	—	—
Oregon	20	28	43	15	13	32	5	15	11
Pennsylvania	266	262	255	234	207	198	32	55	57
Rhode Island	—	10	4	—	10	4	—	—	—
South Carolina	3	5	11	3	5	11	—	—	—
South Dakota	3	8	7	3	8	7	—	—	—
Tennessee	20	26	10	20	15	9	—	11	1
Texas	53	67	78	45	66	76	8	1	2
Utah	13	17	33	13	13	19	—	4	14
Vermont	—	—	—	—	—	—	—	—	—
Virginia	9	19	20	9	19	20	—	—	—
Washington	80	112	127	56	65	69	24	47	58
West Virginia	3	—	2	3	—	2	—	—	—
Wisconsin	45	69	63	42	59	63	3	10	—
Wyoming	3	—	11	3	—	—	—	—	11
Puerto Rico	14	17	32	14	17	32	—	—	—

[1] Includes three doctorates awarded in New York.

[2] Includes 13 doctorates, 2 in Massachusetts and 11 in New York.

[3] Includes 19 doctorates: 1 in Massachusetts and 18 in New York.

SOURCES: American Nurses' Association. Facts About Nursing: A Statistical Summary. New York, The Association, Annual eds.: 1959, p. 97; and 1965, pp. 111 and 114.

National League for Nursing, New York, New York. Unpublished data.

Table 37a.—Distribution of professional nurse trainees preparing for advanced positions, by *field of study:* selected years 1957–1963

Field of study	Total 1957–63	Total 1957–59	1960	1961	1962	1963
Total	*10, 853*	*3, 851*	*1, 617*	*1, 747*	*1, 814*	*1, 824*
Administration	2, 186	966	314	301	311	294
Supervision	2, 556	811	424	430	460	431
Teaching	6, 087	2, 056	879	1, 014	1, 039	1, 099
No data	24	18	—	2	4	—

Table 37b.—Distribution of professional nurse trainees preparing for advanced positions, by *level of study:* selected years 1957–1963

Level of study	Total 1957–63	Total 1957–59	1960	1961	1962	1963
Total	*10, 853*	*3, 851*	*1, 617*	*1, 747*	*1, 814*	*1, 824*
Pre-baccalaureate	4, 403	1, 198	719	814	840	832
Post-baccalaureate	6, 262	2, 565	873	911	951	962
Post-master's	188	88	25	22	23	30

Table 37c.—Distribution of professional nurse trainees preparing for advanced positions by *area of service* for which they were preparing: selected years 1957–1963

Area of service	Total 1957–63	Total 1957–59	1960	1961	1962	1963
Total	*10, 853*	*3, 851*	*1, 617*	*1, 747*	*1, 814*	*1, 824*
Hospital nursing service	2, 866	951	463	460	515	477
Nursing education	6, 087	2, 125	871	1, 001	1, 011	1, 079
Public health nursing	1, 692	619	272	272	274	255
Other	187	138	11	12	13	13
No data	21	18	—	2	1	—

SOURCES: U.S. Department of Health, Education, and Welfare, Public Health Service. Nurses for Leadership. The Professional Nurse Traineeship Program. Report of the 1963 Evaluation Conference. Public Health Service Pub. No. 1098. Washington, U.S. Government Printing Office, p. 38.
U.S. Department of Health, Education, and Welfare, Public Health Service, Division of Nursing. Unpublished data.

Table 38.—Earned degrees in nursing conferred by higher educational institutions, by region: selected years 1926–1964

Year	United States[1]	Region			
		Northeast	North Central	South	West
	Baccalaureate[2]				
1926	33	2	15	5	11
1928	58	11	21	13	13
1930	63	23	31	2	7
1932	171	58	64	23	26
1934	224	53	95	43	33
1936	501	77	202	137	85
1938	596	113	182	146	155
1940	835	116	372	110	237
1942	893	197	385	74	237
1948	3, 348	983	1, 249	513	603
1950	3, 283	1, 020	998	556	709
1952	3, 872	. . .	. . .	. . .	. . .
1954	4, 275	. . .	. . .	. . .	. . .
1956	5, 203	1, 668	1, 687	1, 016	830
1958	5, 722	1, 817	1, 850	1, 171	879
1960	6, 656	2, 130	1, 955	1, 367	1, 193
1962	6, 653	2, 169	1, 981	1, 352	1, 135
1964	7, 504	2, 192	2, 376	1, 653	1, 245
	Master's degree and above				
1934	1	—	—	—	1
1936	2	—	1	1	—
1938	75	42	29	4	—
1940	106	49	48	9	—
1942	96	35	50	11	—
1948	200	117	55	22	6
1950	368	274	48	43	3
1952[3]	550 (3)	358 (2)	107	62 (1)	23
1954	601 (3)	380 (3)	111	61	49
1956	601 (5)	328 (5)	162	64	47
1958	1, 026 (8)	547 (8)	248	119	112
1960	1, 203 (6)	564 (6)	253	191	195
1962	1, 111 (13)	476 (13)	232	183	220
1964	1, 301 (19)	511 (19)	273	211	306

[1] Totals include Puerto Rico, but regions do not.

[2] Includes degrees earned in initial baccalaureate and in post-R.N. baccalaureate programs.

[3] Numbers in parentheses indicate doctoral degrees included in the count.

SOURCES: Tibbitts, Helen G., and Levine, Eugene. Health Manpower Source Book, Section 2—Nursing Personnel. Public Health Service Pub. No. 263. Washington, U.S. Government Printing Office, 1953, p. 44.

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National League for Nursing, New York, New York. Unpublished data.

Table 39.—Earned degrees in nursing conferred by higher educational institutions, by region and State: selected years 1940–1964

Region and State	Baccalaureate[1]				Master's degree[2]			
	1940	1950	1960	1964	1940	1950	1960	1964
United States	835	3, 283	6, 645	7, 466	106	368	1, 203 (6)	1, 301 (19)
Northeast	116	1, 020	2, 130	2, 192	49	274	564 (6)	511 (19)
North Central	372	998	1, 955	2, 376	48	48	253	273
South	110	556	1, 367	1, 653	9	43	191	211
West	237	709	1, 193	1, 245	—	3	195	306
Alabama	—	7	72	73	—	—	8	7
Alaska	—	—	—	—	—	—	—	—
Arizona	—	6	—	58	—	—	—	—
Arkansas	—	—	21	10	—	—	—	—
California	105	289	454	500	—	—	64	162
Colorado	1	85	199	132	—	—	61	49
Connecticut	—	54	81	123	49	46	4	14
Delaware	—	—	—	—	—	—	—	—
District of Columbia	12	166	98	114	9	40	106	91
Florida	—	15	109	208	—	—	—	—
Georgia	—	5	51	58	—	—	14	29
Hawaii	—	—	39	26	—	—	—	—
Idaho	7	2	8	8	—	—	—	—
Illinois	57	239	176	305	—	25	10	13
Indiana	49	76	189	177	—	—	32	37
Iowa	23	19	120	126	—	—	7	8
Kansas	23	27	74	84	—	—	—	—
Kentucky	—	6	55	72	—	—	—	—
Louisiana	1	25	123	122	—	—	—	—
Maine	—	19	—	19	—	—	—	—
Maryland	3	47	140	132	—	1	18	43
Massachusetts	21	142	366	369	—	3	129	123 (1)
Michigan	10	89	280	286	—	—	54	59
Minnesota	24	47	342	313	—	—	69	54
Mississippi	—	—	20	28	—	—	—	—
Missouri	64	98	173	185	1	10	35	36
Montana	—	28	56	43	—	—	10	12
Nebraska	52	81	55	103	—	—	—	—
Nevada	—	—	—	10	—	—	—	—
New Hampshire	1	10	16	33	—	—	—	—
New Jersey	—	1	84	110	—	—	2	4
New Mexico	—	—	19	25	—	—	—	—
New York	73	597	1, 163	1, 111	—	206	398 (6)	313 (18)
North Carolina	29	45	155	213	—	—	32	38
North Dakota	—	3	25	54	—	—	—	—
Ohio	49	220	327	485	47	9	33	55
Oklahoma	—	6	35	24	—	—	—	—
Oregon	57	73	102	143	—	—	3	11
Pennsylvania	19	177	372	355	—	19	31	57
Rhode Island	2	17	22	35	—	—	—	—
South Carolina	—	18	8	32	—	—	—	—
South Dakota	—	3	52	47	—	—	—	—
Tennessee	58	81	128	76	—	—	5	1
Texas	7	72	243	312	—	2	8	2
Utah	4	55	62	69	—	—	—	14
Vermont	—	3	26	37	—	—	—	—
Virginia	—	53	94	133	—	—	—	—
Washington	63	171	241	212	—	3	57	58
West Virginia	—	10	15	46	—	—	—	—
Wisconsin	21	96	142	211	—	4	13	11
Wyoming	—	—	13	19	—	—	—	—
Puerto Rico	—	—	11	38	—	—	—	—

[1] Explained in table 38. [2] Numbers in parentheses indicate doctoral degrees included in the count.

SOURCES: Tibbitts, Helen G., and Levine, Eugene. Health Manpower Source Book, Section 2—Nursing Personnel. Public Health Service Pub. No. 263. Washington, U.S. Government Printing Office, 1953, p. 45.
American Nurses' Association. Facts About Nursing: A Statistical Summary. New York, The Association. 1961 ed., pp. 88, 111, and 118.
Marshall, Eleanor D., and Moses, Evelyn B. The Nations' Nurses. Inventory of Professional Registered Nurses. New York, American Nurses' Association, 1965, p. 99.
National League for Nursing, New York, New York. Unpublished data.

Table 40.—Full-time nurse instructors in schools of professional nursing, students per instructor, and average enrollment per school, by region and State: 1936, 1949, and 1964

Region and State	Number of instructors			Students per instructor			Enrollment per school		
	1936	[1] 1949	[1] 1964	1936	[1] 1949	[1] 1964	1936	[1] 1949	[1] 1964
United States	4, 675	10, 406	12, 334	15	8	9	52	74	112
Northeast	1, 643	3, 830	4, 342	16	8	9	58	79	114
North Central	1, 596	3, 475	3, 992	15	8	10	53	79	123
South	1, 004	2, 088	2, 669	15	9	9	42	62	99
West	432	1, 013	1, 331	15	8	9	54	74	108
Alabama	66	99	149	12	9	8	31	55	103
Alaska	—	—	—	—	—	—	—	—	—
Arizona	13	35	97	15	8	10	49	70	140
Arkansas	25	50	59	10	11	10	31	68	97
California	177	384	632	14	8	9	70	76	100
Colorado	54	145	117	13	5	9	47	70	119
Connecticut	102	286	262	16	7	9	76	96	131
Delaware	14	57	45	20	7	10	41	55	63
District of Columbia	41	75	98	16	8	10	84	73	159
Florida	48	98	170	13	8	11	43	59	122
Georgia	46	83	210	18	14	12	56	98	145
Hawaii	. . .	. . .	35	. . .	. . .	11	. . .	. . .	125
Idaho	23	44	26	11	8	10	32	47	65
Illinois	419	714	785	12	7	9	47	69	111
Indiana	103	243	284	17	8	11	63	74	136
Iowa	101	217	262	16	8	9	51	69	99
Kansas	90	182	158	14	7	9	29	45	78
Kentucky	49	90	158	16	11	8	42	73	84
Louisiana	48	115	142	21	13	8	72	103	119
Maine	51	82	71	14	9	9	31	60	109
Maryland	100	233	285	15	7	9	59	72	141
Massachusetts	282	626	793	16	8	9	59	77	125
Michigan	136	385	468	18	8	10	78	118	150
Minnesota	113	294	345	19	10	11	74	110	156
Mississippi	47	89	73	12	8	7	18	35	60
Missouri	113	297	322	16	7	10	58	79	114
Montana	38	56	58	14	9	8	43	86	96
Nebraska	51	127	155	16	8	10	58	80	114
Nevada	—	—	11	—	—	6	—	—	66
New Hampshire	49	88	81	13	6	8	34	42	68
New Jersey	175	370	379	17	7	9	62	64	96
New Mexico	5	17	8	11	3	10	28	51	80
New York	463	1, 238	1, 423	16	8	9	65	86	115
North Carolina	89	225	301	13	9	9	32	52	89
North Dakota	44	68	71	14	10	9	37	74	79
Ohio	285	640	788	14	8	10	58	80	140
Oklahoma	34	74	76	16	9	9	39	58	70
Oregon	25	80	92	18	8	11	49	69	194
Pennsylvania	466	1, 038	1, 209	16	10	10	57	87	115
Rhode Island	31	46	81	17	9	10	76	72	137
South Carolina	46	92	122	15	8	9	35	47	90
South Dakota	29	83	88	17	8	10	31	94	84
Tennessee	73	135	183	16	10	9	57	83	100
Texas	145	259	316	16	9	8	45	68	80
Utah	14	52	65	31	10	10	72	63	103
Vermont	24	56	43	16	4	11	32	30	95
Virginia	63	186	189	18	10	11	46	56	90
Washington	79	200	177	15	9	11	50	83	125
West Virginia	70	128	93	12	8	11	26	43	86
Wisconsin	112	225	266	15	8	12	57	79	146
Wyoming	4	—	13	8	—	10	33	—	126
Puerto Rico	. . .	. . .	33	. . .	. . .	14	. . .	. . .	90

[1] Data are for schools reporting both faculty number and student enrollment.

SOURCES: Tibbitts, Helen G., and Levine, Eugene. Health Manpower Source Book, Section 2—Nursing Personnel. Public Health Service Pub. No. 263. Washington, U.S. Government Printing Office, 1953, p. 42.
National League for Nursing, New York, New York. Unpublished data.

Table 41.—Number of full-time nurse instructors in professional nursing programs,[1] total and with academic degrees, by region and State: 1949 and 1964

Region and State	Total nurse instructors		Nurse instructors with academic degrees			
			Number		Percent	
	1949	1964	1949	1964	1949	1964
United States	10, 431	12, 504	5, 722	10, 113	55	81
Northeast	3, 830	4, 411	2, 090	3, 562	55	81
North Central	3, 475	4, 009	1, 971	3, 175	57	79
South	2, 088	2, 727	939	2, 091	45	77
West	1, 038	1, 357	722	1, 285	70	95
Alabama	99	149	33	115	33	77
Alaska	—	—	—	—	—	—
Arizona	35	97	19	91	54	94
Arkansas	50	59	13	33	26	56
California	384	654	278	640	72	98
Colorado	145	121	110	117	76	97
Connecticut	286	278	183	216	64	78
Delaware	57	45	26	26	46	58
District of Columbia	75	115	65	102	87	89
Florida	98	178	39	165	40	93
Georgia	83	210	39	148	47	70
Hawaii	25	35	24	35	96	100
Idaho	44	26	19	20	43	77
Illinois	714	785	352	597	49	76
Indiana	243	296	124	244	51	82
Iowa	217	262	107	178	49	68
Kansas	182	161	80	115	44	71
Kentucky	90	158	39	116	43	73
Louisiana	115	142	60	131	52	92
Maine	82	71	27	46	33	65
Maryland	233	285	126	214	54	75
Massachusetts	626	793	305	671	49	85
Michigan	385	468	233	400	60	85
Minnesota	294	345	202	299	69	87
Mississippi	89	73	34	56	38	77
Missouri	297	322	179	252	60	78
Montana	56	58	36	55	64	95
Nebraska	127	155	77	117	61	75
Nevada	—	11	—	11	—	100
New Hampshire	88	81	32	58	36	72
New Jersey	370	379	172	319	46	84
New Mexico	17	8	11	7	65	88
New York	1, 238	1, 459	742	1, 157	60	79
North Carolina	225	305	55	214	24	70
North Dakota	68	71	32	55	47	77
Ohio	640	790	396	612	62	77
Oklahoma	74	76	39	66	53	87
Oregon	80	92	61	80	76	87
Pennsylvania	1, 038	1, 226	559	988	54	81
Rhode Island	46	81	31	69	67	85
South Carolina	92	122	24	70	26	57
South Dakota	83	88	44	74	53	84
Tennessee	135	183	77	132	57	72
Texas	259	316	141	267	54	84
Utah	52	65	37	56	71	86
Vermont	56	43	39	38	70	88
Virginia	186	199	81	157	44	79
Washington	200	177	127	160	64	90
West Virginia	128	112	48	79	38	71
Wisconsin	225	266	145	232	64	87
Wyoming	—	13	—	13	—	100
Puerto Rico	46	33	5	19	11	58

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[1] Includes full-time nurse instructors for reporting schools only.

SOURCES: Tibbitts, Helen G., and Levine, Eugene. Health Manpower Source Book, Section 2—Nursing Personnel. Public Health Service Pub. 263. Washington, U.S. Government Printing Office, 1953, p. 43.
National League for Nursing, New York, New York. Unpublished data.

PART V

PRACTICAL NURSING AND PRACTICAL NURSE EDUCATION

In 1954, Moore[1] stated: "The developing concepts of the duties and responsibilities of the practical nurse are reflected not only in the length of training considered requisite, but also in the definition of duties." She called attention to the difference between the 1940 definition of practical nurse, which made no differentiation between the practical nurse and other nonprofessional personnel such as attendants, ward helpers, nurses' aides, etc., and the 1954 definition, approved by the National League for Nursing. The latter specifies that a practical nurse is prepared to care for the sick in a team relationship with registered professional nurses, and as a private practitioner in the homes of selected patients. She works only under direct orders of a licensed physician or under the supervision of a registered professional nurse.

The census reports prior to 1940 showed an occupational listing for untrained nurses, which probably included practical nurses. In 1940 numbers of practical nurses and midwives were not reported separately. Table 42 shows an increase from 1950 to 1960 of more than 69,000 practical nurses, or 25 per 100,000 population in the country. Numerically the South continues to employ more practical nurses than any of the other three census regions, but the West shows a considerably larger ratio to population.

In 1950, 4.1 percent of all practical nurses employed were male.[2] Ten years later the proportion was only slightly greater: 4.3 percent.[3] Other characteristics reported by the census were based on the following numbers of female practical nurses and midwives: In 1950—131,695, and in 1960—197,824. Their median age in 1950 was 49.1; in 1960, 48.5. The proportion who were over 45 years of age also dropped—from 59.9 percent in 1950 to 59.1 percent in 1960.[4]

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[1] Moore, Louise. Practical Nurse Training Comes of Age. U.S. Department of Health, Education, and Welfare, Office of Education, Division of Vocational Education, Misc. 3468, September 1954. Processed, p. 6.

[2] U.S. Department of Commerce, Bureau of the Census. U.S. Census of Population, 1950, vol. II—Characteristics of The Population. Washington, U.S. Government Printing Office, 1953. Table 125.

[3] Ibid., 1960 census. Detailed Characteristics. Table 202.

The proportion of female practical nurses and midwives who were nonwhite increased from 12.4 percent in 1950 to 17.0 percent in 1960.[5]

Again, caution should be exercised in the use of these statistics, for the reasons discussed in part I.

It is estimated that by 1962 the number of practical nurses had increased from the 206,000 reported by the census in 1960 to approximately 225,000,[6] and by 1964 had risen to 250,000. They are employed in hospitals, nursing homes, public health agencies, and in private duty.

Today, throughout the United States and in Guam, Puerto Rico, Samoa, and the Virgin Islands, the practice of practical nursing is regulated through a licensing system which sets minimum standards for practice. Eight of the licensing laws are mandatory in that they define practical nursing and prohibit unlicensed persons from such practice; the remainder are permissive, and protect a variety of titles. In 1963, more than 25,000 licenses were issued to practical nurses never before licensed in the United States, the great majority on the basis of examination (table 43). Included in the total were 14 licenses issued on the basis of previous licensure in a foreign country.

Practical Nurse Training

Since 1954 the number of approved programs of practical nursing in the total United States, their admissions and graduations, have all approximately tripled (table 44). Federal legislation, specifically the Health Amendments Act of 1956, the Area Redevelopment Act of 1961, and the Manpower Development and Training Act of 1962, have contributed to this growth.[7]

Administratively, 52 percent of the practical nursing programs are controlled by trade, technical, or vocational schools; about 26 percent are hospital controlled; the remainder are in junior colleges, secondary schools, senior colleges, and independent agencies.[8]

The Southern region has ranked highest in numbers of schools and students throughout the years as shown in tables 45 to 47. Trends in the individual States vary.

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[4] Ibid., 1950 census. Table 158; and 1960 census. Table 204.

[5] Ibid., 1950 census. Table 159; and 1960 census. Table 205.

[6] U.S. Department of Health, Education, and Welfare. Toward Quality in Nursing: Needs and Goals. Report of the Surgeon General's Consultant Group on Nursing. Public Health Service Publication No. 992. Washington, U.S. Government Printing Office, 1963, p. 6.

[7] American Nurses' Association. Facts About Nursing: A Statistical Summary, 1965 ed. New York, The Association, 1965, p. 184.

[8] National League for Nursing, State Approved Schools for Practical and Vocational Nursing, 1965 ed. New York, The League, 1965, p. 64.

A larger number and proportion of men obtain preparation as practical nurses than as professional nurses. In 1962–63, the practical or vocational nursing programs graduated 744 men; professional nursing programs only 393.[9]

Although reporting on the question of race is not nearly as complete for practical and vocational nursing programs as it is for professional programs, the proportion of Negroes admitted to the former programs were much higher than the proportion entering professional programs. In practical and vocational nursing schools Negroes represented 16.4 percent of total admissions to the reporting schools. The proportion admitted to professional nursing programs was 3.0 percent.[10]

Figure 5 highlights the differences in geographical distribution of the initial professional nursing programs and the practical nursing programs in 1964. In comparing graduations, however, it must be remembered that practical nursing programs usually are a year in length, so that most of the graduates were also counted as admissions in the same academic year. On the other hand, professional nursing students who were graduated in 1964 would have been admitted 2, 3, or 4 years previously, depending on the length of the program.

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[9] American Nurses' Association. Facts About Nursing: A Statistical Summary, 1965 ed. New York, The Association, 1965, p. 184.

[10] Tate, Barbara L. and Carnegie, Elizabeth. Negro Admissions, Enrollments, and Graduations—1963. Nursing Outlook, 13 : 2, February 1965, pp. 61–63.

TABLES IN PART V

Practical Nursing and Practical Nurse Education

Table 42. Number of active practical nurses and nurse-population ratios, by region and State: 1950 and 1960

Table 43. Practical nurses licensed for the first time and proportion licensed by examination, by region and State: selected years 1945–63

Table 44. Practical nurse training in the United States: 1954–64

Table 45. Number of approved programs of practical nursing, by region and State: selected years 1954–64

Table 46. Admissions to approved schools of practical nursing, by region and State: selected years 1954–64

Table 47. Graduations from approved schools of practical nursing, by region and State: selected years 1954–64

Figure 5. The distribution of nursing education programs, admissions, and graduations varies among the four geographic regions.

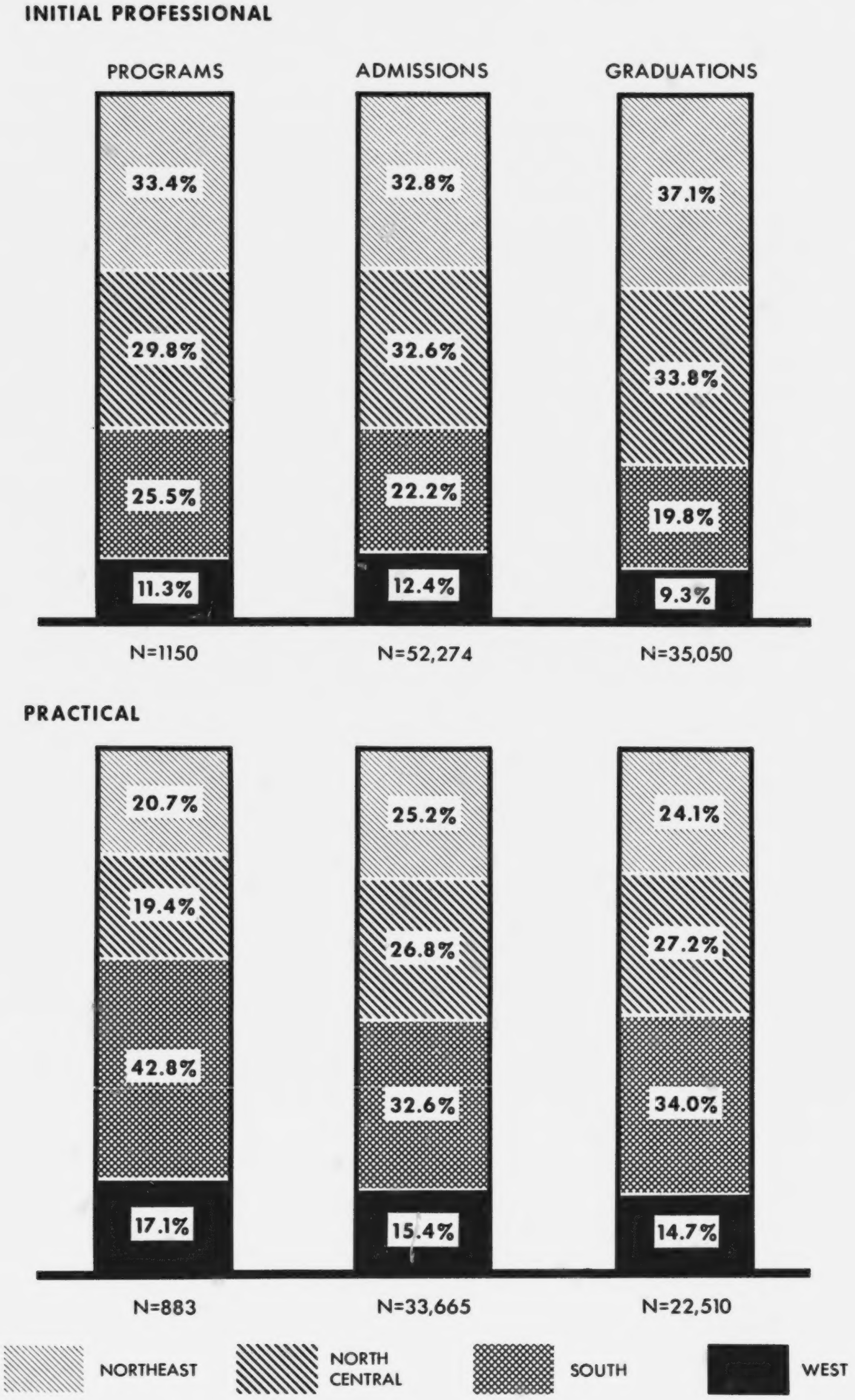

Table 42.—Number of active practical nurses and nurse-population ratios, by region and State: 1950 and 1960

Region and State	Number		Rate per 100,000 population	
	1950	1960	1950	1960
United States	136, 541	205, 974	90	115
Northeast	34, 909	51, 592	88	115
North Central	36, 001	57, 540	81	111
South	43, 522	62, 275	92	113
West	22, 109	34, 567	109	123
Alabama	2, 608	3, 617	85	111
Alaska	57	118	44	52
Arizona	565	1, 205	75	93
Arkansas	1, 614	2, 010	85	113
California	12, 708	18, 619	120	118
Colorado	1, 271	2, 603	96	148
Connecticut	1, 774	2, 800	88	110
Delaware	336	471	106	106
District of Columbia	1, 280	1, 749	160	229
Florida	3, 124	5, 046	113	102
Georgia	3, 249	4, 613	94	117
Hawaii	582	952	116	150
Idaho	524	1, 017	89	152
Illinois	6, 174	8, 440	71	84
Indiana	2, 942	3, 896	75	84
Iowa	2, 315	2, 863	88	104
Kansas	1, 825	2, 527	96	116
Kentucky	2, 296	2, 775	78	91
Louisiana	2, 564	3, 521	96	108
Maine	847	1, 548	93	160
Maryland	2, 458	2, 847	105	92
Massachusetts	4, 483	11, 339	96	220
Michigan	5, 243	11, 864	82	152
Minnesota	2, 758	3, 948	92	116
Mississippi	1, 548	2, 592	71	119
Missouri	3, 895	5, 862	98	136
Montana	437	742	74	110
Nebraska	1, 188	1, 895	90	134
Nevada	110	242	69	85
New Hampshire	581	922	109	152
New Jersey	4, 012	4, 870	83	80
New Mexico	359	770	53	81
New York	15, 976	15, 191	108	91
North Carolina	3, 280	3, 967	81	87
North Dakota	257	522	41	83
Ohio	6, 380	11, 615	80	120
Oklahoma	1, 995	3, 838	89	165
Oregon	1, 820	2, 656	120	150
Pennsylvania	6, 187	13, 125	59	116
Rhode Island	597	1, 118	75	130
South Carolina	1, 643	1, 610	78	68
South Dakota	383	605	59	89
Tennessee	3, 237	4, 381	98	123
Texas	8, 011	13, 386	104	140
Utah	412	801	60	90
Vermont	452	679	120	174
Virginia	3, 220	3, 960	97	100
Washington	3, 148	4, 597	132	161
West Virginia	1, 059	1, 892	53	102
Wisconsin	2, 641	3, 503	77	89
Wyoming	116	245	40	74
Puerto Rico	2, 033	3, 116	92	133

SOURCES: U.S. Department of Commerce, Bureau of the Census. United States Census of Population 1960. Detailed characteristics. State volumes. Washington, U.S. Government Printing Office, 1962.

U.S. Department of Commerce, Bureau of the Census. Statistical Abstract of the United States. 1964 ed. Washington, U.S. Government Printing Office, 1964, p. 12.

Table 43.—Practical nurses licensed for the first time and proportion licensed by examination, by region and State: selected years 1945–1963

Region and State	Total number of new licenses					Percent of new licenses by examination				
	1945	1950	1955	1960	1963	1945	1950	1955	1960	1963
United States	858	11, 425	16, 930	19, 760	25, 058	87	44	73	87	97
Northeast	688	4, 968	2, 435	6, 757	5, 482	91	30	95	66	100
North Central	8	1, 887	5, 982	4, 945	5, 869	100	87	51	100	100
South	162	2, 167	5, 279	5, 425	9, 773	70	79	79	100	94
West	—	2, 403	3, 234	2, 633	3, 934	—	6	89	93	98
Alabama	—	53	270	327	—	—	100	100	100	—
Alaska	—	—	22	14	23	—	—	100	93	96
Arizona	—	—	49	137	132	—	—	100	100	100
Arkansas	48	183	330	262	250	—	15	100	100	100
California	—	—	1, 694	1, 146	2, 095	—	—	94	100	100
Colorado	—	—	—	351	248	—	—	—	48	100
Connecticut	44	128	223	221	297	100	100	100	100	100
Delaware	—	—	109	23	30	—	—	13	100	100
District of Columbia	—	—	—	—	765	—	—	—	—	21
Florida	14	306	429	450	579	100	100	98	100	100
Georgia	3	—	150	272	317	100	—	100	100	100
Hawaii	—	130	138	92	51	—	69	70	100	98
Idaho	—	34	150	111	158	—	15	100	100	100
Illinois	—	—	402	541	904	—	—	97	100	100
Indiana	—	—	319	286	367	—	—	100	100	100
Iowa	—	325	59	165	232	—	100	100	100	100
Kansas	—	653	52	69	164	—	100	100	100	100
Kentucky	—	44	101	64	3, 021	—	100	100	100	100
Louisiana	—	363	320	230	332	—	100	100	100	100
Maine	—	—	7	80	78	—	—	100	100	100
Maryland	90	225	316	233	228	100	100	100	100	100
Massachusetts	53	253	350	2, 863	693	100	100	100	22	100
Michigan	8	67	712	1, 112	1, 268	100	100	100	100	100
Minnesota	—	354	199	652	704	—	100	99	100	100
Mississippi	—	—	1, 097	181	210	—	—	9	100	100
Missouri	—	—	3, 845	426	466	—	—	25	100	100
Montana	—	—	77	19	39	—	—	100	100	100
Nebraska	—	—	—	88	108	—	—	—	100	100
Nevada	—	131	80	34	60	—	18	100	97	100
New Hampshire	—	—	5	56	103	—	—	100	100	100
New Jersey	—	1, 589	152	455	594	—	(1)	100	100	100
New Mexico	—	—	294	139	151	—	—	23	100	99
New York	586	2, 975	1, 272	1, 730	2, 099	89	36	91	98	100
North Carolina	—	46	392	309	423	—	100	100	100	100
North Dakota	—	45	30	68	120	—	31	100	100	100
Ohio	—	—	—	1, 024	1, 097	—	—	—	99	99
Oklahoma	—	40	49	190	239	—	100	84	99	100
Oregon	—	658	98	174	251	—	9	100	100	100
Pennsylvania	5	15	290	1, 136	1, 399	100	100	100	98	100
Rhode Island	—	8	96	146	128	—	—	99	99	100
South Carolina	—	366	84	145	195	—	21	100	100	100
South Dakota	—	218	35	136	3	—	3	100	100	100
Tennessee	—	398	366	520	619	—	100	100	100	100
Texas	—	—	932	1, 555	1, 960	—	—	100	100	100
Utah	—	47	113	26	196	—	100	100	100	53
Vermont	—	—	40	70	91	—	—	100	100	100
Virginia	7	143	334	498	440	100	97	100	100	100
Washington	—	1, 403	490	381	516	—	—	100	100	100
West Virginia	—	—	—	166	165	—	—	—	100	100
Wisconsin	—	225	329	378	436	—	100	100	100	100
Wyoming	—	—	29	9	14	—	—	100	100	100
Puerto Rico	. . .	. . .	41	73	. . .	—	—	100	100	—
Virgin Islands	. . .	. . .	. . .	—	4	—	—	—	—	100

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[1] Less than 0.5 percent.

SOURCES: Tibbitts, Helen G., and Levine, Eugene. Health Manpower Source Book, Section 2—Nursing Personnel. Public Health Service Pub. No. 263. Washington, U.S. Government Printing Office, 1953, p. 49.

American Nurses' Association. Facts About Nursing: A Statistical Summary. New York, The Association. Annual eds.: 1957, p. 173; 1962–63, p. 197; and 1965, p. 200.

Table 44.—Practical[1] nurse training in the United States:[2] 1954–1964

Academic year ending	Approved programs (3)	Reporting programs	Admissions	Graduations
1954	296	290	12, 075	7, 109
1955	395	361	15, 440	9, 694
1956	396	396	15, 526	10, 641
1957	439	432	16, 843	10, 666
1958	520	511	20, 531	12, 407
1959	607	595	23, 116	14, 573
1960	661	632	23, 060	16, 491
1961	693	660	24, 955	16, 635
1962	739	707	26, 660	18, 106
1963	851	810	30, 585	19, 621
1964	895	863	34, 131	22, 761

[1] Includes attendant nursing 1954–1957, and vocational nursing 1956–1964.

[2] Alaska, Hawaii and Puerto Rico were included for all years, American Samoa and Virgin Islands for 1962 and later.

[3] Accredited by State agencies where licensure provisions were in force, and by the National Association for Practical Nursing Education where no licensure provisions existed.

SOURCES: American Nurses' Association. Facts About Nursing: A Statistical Summary. New York, The Association. Annual eds.: 1955–56, pp. 147–8; 1960, pp. 171 and 173; and 1965, p. 185.
National League for Nursing, New York, New York. Unpublished data.

Table 45.—Number of approved [1] programs of practical nursing, by region and State: selected years 1954–1964

Region and State	1954	1956	1958	1960	1962	1964
United States	290	408	517	653	727	883
Northeast	50	72	90	124	143	183
North Central	49	73	101	123	137	171
South	123	174	223	298	323	378
West	68	89	103	108	124	151
Alabama	9	9	10	11	12	12
Alaska	1	1	1	1	1	1
Arizona	1	1	3	4	3	5
Arkansas	5	5	7	10	10	14
California	24	39	41	43	48	55
Colorado	5	6	6	8	11	14
Connecticut	1	1	1	4	4	6
Delaware	—	1	1	1	2	2
District of Columbia	3	3	2	4	4	3
Florida	9	13	17	22	23	25
Georgia	1	8	14	23	27	32
Hawaii	1	1	1	1	1	1
Idaho	13	11	17	13	15	17
Illinois	5	9	13	16	19	29
Indiana	1	2	4	6	7	11
Iowa	2	4	6	8	11	14
Kansas	1	2	4	4	4	5
Kentucky	3	5	7	11	13	12
Louisiana	7	10	12	13	12	13
Maine	—	1	2	2	2	4
Maryland	10	12	13	12	13	12
Massachusetts	14	17	21	22	28	31
Michigan	11	14	14	15	19	27
Minnesota	10	14	20	22	22	23
Mississippi	—	4	6	8	10	13
Missouri	—	4	8	13	16	15
Montana	1	1	1	2	4	7
Nebraska	—	1	2	3	3	4
Nevada	1	1	3	4	6	7
New Hampshire	1	1	2	3	3	4
New Jersey	7	9	11	16	20	23
New Mexico	—	3	5	5	5	5
New York	17	27	33	43	50	77
North Carolina	6	9	12	14	19	26
North Dakota	2	2	2	3	3	3
Ohio	11	13	18	22	22	29
Oklahoma	3	3	7	10	10	12
Oregon	3	4	6	6	9	10
Pennsylvania	8	12	15	29	31	33
Rhode Island	1	2	2	2	2	2
South Carolina	8	7	9	11	16	17
South Dakota	1	1	2	3	3	3
Tennessee	7	8	10	9	10	9
Texas	43	62	79	115	113	137
Utah	3	3	3	3	2	3
Vermont	1	2	3	3	3	3
Virginia	7	11	13	20	24	31
Washington	15	17	16	17	18	24
West Virginia	2	4	4	4	5	8
Wisconsin	5	7	8	8	8	8
Wyoming	—	1	—	1	1	2
American Samoa	—	—	—	—	1	1
Puerto Rico	—	4	3	8	9	9
Virgin Islands	—	—	—	—	2	2

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[1] Accredited by State agency where licensure provision was in force, and by National Association for Practical Nurse Education where no licensure provisions existed.

SOURCES: American Nurses' Association. Facts About Nursing: A Statistical Summary, 1965 ed. New York, The Association, Annual eds.: 1955–56, p. 150; 1958, p. 175; 1960, p. 172; 1961, p. 190; and 1964, p. 193.
National League for Nursing, New York, New York. Unpublished data, 1965.

Table 46.—Admissions to approved schools [1] of practical nursing, by region and State: selected years 1954–1964

Region and State	1954	1956	1958	1960	1962	1964
United States	12, 075	15, 410	20, 445	22, 870	26, 381	33, 665
Northeast	2, 524	3, 544	4, 106	5, 189	6, 364	8, 496
North Central	2, 791	3, 737	5, 342	5, 821	6, 766	9, 025
South	3, 925	4, 900	7, 488	8, 269	9, 088	10, 944
West	2, 835	3, 229	3, 509	3, 591	4, 163	5, 200
Alabama	313	343	572	486	442	540
Alaska	31	34	38	37	20	48
Arizona	70	105	128	98	150	232
Arkansas	221	205	322	360	394	398
California	1, 307	1, 673	1, 623	1, 794	1, 851	2, 354
Colorado	331	220	252	269	383	387
Connecticut	206	213	232	296	335	240
Delaware	—	29	36	40	59	78
District of Columbia	370	296	184	277	279	266
Florida	262	357	415	571	726	992
Georgia	47	247	374	375	442	659
Hawaii	106	84	106	88	82	83
Idaho	191	182	247	112	187	164
Illinois	458	597	653	758	1, 004	1, 535
Indiana	—	113	306	355	538	506
Iowa	32	84	115	155	224	403
Kansas	56	102	192	173	167	307
Kentucky	134	184	267	324	426	443
Louisiana	262	405	416	454	371	517
Maine	—	27	58	76	79	126
Maryland	244	373	328	290	356	393
Massachusetts	444	511	705	721	1, 001	1, 311
Michigan	821	873	1, 178	1, 223	1, 479	1, 929
Minnesota	335	405	642	703	652	882
Mississippi	—	163	211	181	278	315
Missouri	—	166	462	530	530	642
Montana	10	14	20	38	68	157
Nebraska	—	61	77	103	130	203
Nevada	—	50	39	43	108	104
New Hampshire	18	25	44	78	118	89
New Jersey	200	299	406	560	689	832
New Mexico	—	87	217	197	233	194
New York	1, 098	1, 710	1, 603	1, 908	2, 349	3, 769
North Carolina	216	229	413	478	561	744
North Dakota	35	62	73	77	146	231
Ohio	781	918	1, 145	1, 245	1, 270	1, 660
Oklahoma	86	65	124	336	300	313
Oregon	92	84	179	194	325	283
Pennsylvania	483	597	803	1, 283	1, 535	1, 829
Rhode Island	57	124	158	165	133	150
South Carolina	149	137	188	185	297	297
South Dakota	45	47	75	100	119	112
Tennessee	292	275	608	720	780	773
Texas	1, 028	1, 224	2, 389	2, 453	2, 458	3, 183
Utah	115	88	124	117	133	168
Vermont	18	38	97	102	125	150
Virginia	227	240	453	546	726	760
Washington	582	592	536	589	623	986
West Virginia	74	128	188	193	193	273
Wisconsin	228	309	424	399	507	615
Wyoming	—	16	—	15	—	40
American Samoa	—	—	—	—	18	30
Puerto Rico	—	116	132	190	249	427
Virgin Islands	—	—	—	—	12	9

[1] As defined in table 45.

SOURCES: American Nurses' Association. Facts About Nursing: A Statistical Summary, 1965 ed. New York, The Association, Annual eds.: 1955–56, p. 150; 1958, p. 171; 1960, p. 176; 1961, p. 193; and 1964, p. 196.
National League for Nursing, New York, New York. Unpublished data, 1965.

Table 47.—Graduations from approved schools[1] of practical nursing, by region and State: selected years 1954–1964

Region and State	1954	1956	1958	1960	1962	1964
United States	7, 109	10, 607	12, 350	16, 340	17, 881	22, 510
Northeast	1, 560	2, 370	2, 556	3, 757	4, 318	5, 416
North Central	1, 935	2, 864	3, 509	4, 782	4, 844	6, 122
South	2, 093	3, 308	4, 306	5, 462	6, 120	7, 670
West	1, 521	2, 065	1, 979	2, 339	2, 599	3, 302
Alabama	147	243	285	406	395	400
Alaska	21	24	25	17	—	16
Arizona	26	42	53	102	90	85
Arkansas	80	214	183	341	309	345
California	599	1, 078	834	1, 085	1, 114	1, 393
Colorado	225	162	139	183	285	270
Connecticut	103	143	125	213	206	146
Delaware	—	17	34	34	33	35
District of Columbia	246	160	139	166	133	265
Florida	82	201	303	337	532	647
Georgia	41	121	127	232	325	340
Hawaii	69	51	64	64	50	47
Idaho	105	107	153	100	127	166
Illinois	299	266	396	536	584	846
Indiana	—	109	201	236	323	379
Iowa	25	78	92	139	178	349
Kansas	46	77	102	161	139	273
Kentucky	47	133	208	193	280	325
Louisiana	133	259	268	257	248	300
Maine	—	33	35	53	64	94
Maryland	163	267	224	197	221	222
Massachusetts	267	360	399	575	606	894
Michigan	585	793	818	1, 031	1, 012	1, 251
Minnesota	258	340	439	572	607	716
Mississippi	—	118	143	161	160	244
Missouri	—	106	268	400	379	462
Montana	8	11	13	17	33	86
Nebraska	—	46	33	79	90	128
Nevada	15	20	33	7	62	88
New Hampshire	—	21	25	52	78	60
New Jersey	126	205	235	389	536	570
New Mexico	—	36	124	131	156	156
New York	776	1, 107	1, 059	1, 416	1, 521	2, 242
North Carolina	137	148	175	356	413	554
North Dakota	36	36	54	70	93	135
Ohio	507	771	732	985	986	1, 098
Oklahoma	47	18	108	252	210	247
Oregon	60	58	89	135	194	205
Pennsylvania	267	396	488	867	1, 087	1, 200
Rhode Island	19	77	145	122	122	108
South Carolina	68	88	146	92	201	248
South Dakota	32	37	34	136	100	83
Tennessee	171	203	357	583	633	683
Texas	555	871	1, 236	1, 408	1, 467	2, 176
Utah	63	73	74	72	88	93
Vermont	2	28	45	70	98	102
Virginia	143	203	259	297	411	461
Washington	330	403	378	420	400	671
West Virginia	33	44	111	150	149	178
Wisconsin	147	205	340	437	353	402
Wyoming	—	—	—	6	—	26
American Samoa	—	—	—	—	10	13
Puerto Rico	—	34	115	151	208	221
Virgin Islands	—	—	—	—	7	17

[1] As defined in table 45.

SOURCES: American Nurses' Association. Facts About Nursing: A Statistical Summary, 1965 ed. New York, The Association, Annual eds.: 1955-56, p. 150; 1958, p. 171; 1960, p. 176; 1961. p. 193; and 1964, p. 196.
National League for Nursing, New York, New York. Unpublished data, 1965.

PART VI

PROFESSIONAL NURSES, PRACTICAL NURSES, AIDES, ORDERLIES, AND ATTENDANTS IN HOSPITALS

As shown in table 15a, hospitals have been and continue to be the employers of the greatest numbers of nurses in the country—over 60 percent of the total supply.

The number of professional nursing personnel working in United States hospitals has more than tripled since 1944 (table 48). Part-time personnel are being used in increasing numbers. The steady rise in the ratio of part-time to full-time personnel signifies a trend toward even greater utilization of part-time nurses in the future.[1] Figure 6 compares the 20-year trends from 1944 to 1964 in numbers of full-time and part-time general duty nurses working in hospitals.

The tables in this part are based on published and unpublished data collected by the American Hospital Association from hospitals listed by the Association. In recent years, the American Osteopathic Hospital Association has supplied figures on nursing personnel employed in the osteopathic hospitals.[2]

Year	Number of osteopathic hospitals reporting	Nursing personnel in reporting hospitals		
		Professional	Practical	Other non-professional
1962	152	2, 398	2, 110	3, 602
1964	157	2, 669	2, 491	4, 094

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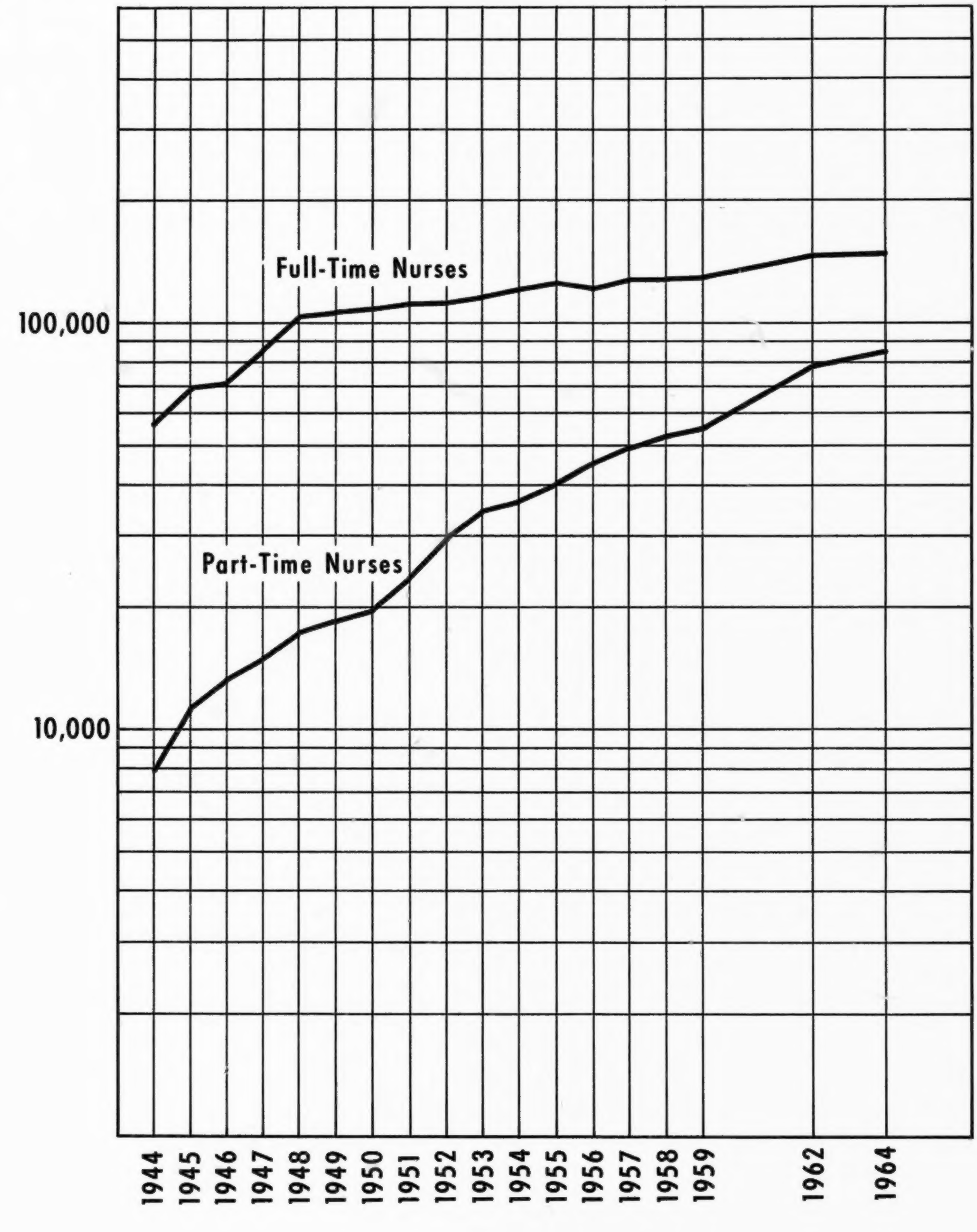
[1] Testoff, Arthur; Levine, Eugene; and Siegel, Stanley E. Analysis of Part-time Nursing in General Hospitals. Hospitals, Journal of the American Hospital Association. 37 : 17, Sept. 1, 1963.

[2] American Nurses' Association. Facts About Nursing: A Statistical Summary. New York, The Association, Annual eds. 1964, pp. 26 and 186; and 1965, pp. 20 and 181.

Figure 6. The number of general duty nurses working part time in hospitals is increasing at a faster pace than the number working full time.



For the biennial estimates of total nurse supply in the United States described in part III, the above figures were projected to the total number of osteopathic hospitals in the country—more than 300. The resulting estimate was added to the numbers projected for hospitals listed by the American Hospital Association in order to arrive at the full complement of professional nurses employed in all types of hospitals.

Statistics on nonprofessional nursing personnel in hospitals have not been collected with any degree of uniformity and therefore trend data are somewhat scanty. The U.S. total number of these personnel increased almost 300 percent between 1941 and 1962, but the increase has not been steady (table 49). The individual States all showed increases in the number of nonprofessional nursing personnel from 1949 to 1959 (table 50). State data have not been available for these hospital employees since 1959.

Two types of analytical information about hospital nursing personnel are presented in tables 51 to 56: nurse-patient ratios and supervisory-staff level nurse ratios. The nurse-patient ratios are indicative in a general way of the amounts of care available to patients, while the supervisory-staff level ratios relate to the amount of supervision available to general duty nurses and nonprofessional nursing personnel. These types of ratios give rise to inferences regarding the adequacy of staffing on hospital nursing units.

For those who wish to convert nurse-patient ratios to hours of care, a transformation factor was developed as follows:

1. In hospitals where nursing personnel work 40 hours a week 48 weeks a year, each person works approximately 1,920 hours per year (i.e., 40×48). The number of patient days per year is the product of 365 multiplied by the average daily patient census. If R represents the number of nursing personnel per 100 patients, NP the total number of nursing personnel, $ADPC$ the average daily patient census, and C the average hours of care available per patient per day, the following relationships can be stated:

$$R=\frac{100\,(NP)}{(ADPC)} \text{ or } \frac{R}{100}=\frac{(NP)}{(ADPC)}$$

$$C=\frac{1920\,(NP)}{365\,(ADPC)}$$

$$C=\frac{1920}{365}\times\frac{R}{100}=\frac{R}{19}$$

Therefore, the average hours of care available per patient in each 24-hour period is about $\frac{1}{19}$ of the number of nursing personnel per 100 patients.

2. For areas with an average workweek of 44 hours, the transformation factor is about $\frac{1}{17}$.

Nurse-patient ratios have been calculated for three types of hospitals: (a) general and allied special, (b) psychiatric, called nervous and mental in 1951, and (c) tuberculosis hospitals. Tables 51 through 56, showing nurse-patient ratios, are in terms of full-time equivalent nurses who give direct care. The table footnotes describe which personnel were included in the ratios.

Caution must be observed in using these ratios as they are more heavily weighted by the situation of a few large hospitals than by that of the more numerous smaller ones. In 1961, Levine and others found that the greatest variability in nurse staffing exists in the smallest and the largest hospitals.[3] The ratios mentioned above are further broken down into professional and nonprofessional bedside personnel to give greater detail of direct nursing care available to patients. In addition, tables 52b, 54b, and 56b show the ratios per 100 patients for *total* nursing personnel in order to give some indication of the total amount of both direct and indirect nursing care available per hundred patients in the hospital. The cost of hospital nursing services per patient would of course be based on total nursing staff, rather than on any selected group.

For general and allied special hospitals, all regions and States have shown increases between 1951 and 1959 in the ratio of nursing personnel to patients with a few minor exceptions (mainly in the non-Federal government group).

In the psychiatric hospitals, formerly called "nervous and mental", the nurse-patient ratios increased between 1951 and 1959 for Federal and other government hospitals, but have decreased for nongovernment hospitals for the United States as a whole (tables 53 and 54). The decrease for the nongovernment hospitals appears to have been caused by a drop of almost 40 percent in the nurse-patient ratios of the Southern region. All other regions showed increases in the nurse-patient ratios for the nongovernment group. With a few exceptions, State trends are similar to the national trends.

In tuberculosis hospitals, the total nurse-patient ratios were approximately the same by type of ownership (tables 55 and 56). The Federal hospitals have more professional nurses per 100 patients than either the other government or the nongovernment hospitals.

Table 57 shows the 1959 ratios of supervisors to bedside nursing personnel giving direct care, in terms of full-time equivalents. The 1951 table[4] has not been reproduced for this report because it was based on individuals rather than on full-time equivalents, and also included staff other than bedside personnel.

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[3] Levine, Eugene; Siegel, Stanley; and De La Puente, Joseph. Diversity of Nurse Staffing Among General Hospitals. Hospitals, Journal of the American Hospital Association, 35: 42–48, May 1, 1961.

[4] Tibbitts, Helen G., and Levine, Eugene. Health Manpower Source Book, Section 2—Nursing Personnel. Public Health Service Publication No. 263. Washington, U.S. Government Printing Office, 1963, p. 81.

TABLES IN PART VI

Professional Nurses, Practical Nurses, Aides, Orderlies, and Attendants in Hospitals

Table 48. Pofessional nursing personnel in hospitals, by type of position: selected years 1944–64

Table 49. Nonprofessional nursing personnel in U.S. hospitals, practical nurses and other: 1941–59, 1962 and 1964

Table 50. Practical nurses and other nonprofessional nursing personnel in hospitals, by region and State: 1949, 1954, 1959

Table 51. Nurse-patient ratios in general and allied special hospitals, by type of control, region, and State: 1951 (bedside nursing personnel)

Table 52a. Nurse-patient ratios in general and allied special hospitals, by type of control, region, and State: 1959 (bedside nursing personnel)

Table 52b. Nurse-patient ratios in general and allied special hospitals, by type of control, region, and State: 1959 (total nursing personnel)

Table 53. Nurse-patient ratios in nervous and mental hospitals, by type of control, region, and State: 1951 (bedside nursing personnel)

Table 54a. Nurse-patient ratios in psychiatric hospitals, by type of control, region, and State: 1959 (bedside nursing personnel)

Table 54b. Nurse-patient ratios in psychiatric hospitals, by type of control, region, and State: 1959 (total nursing personnel)

Table 55. Nurse-patient ratios in tuberculosis hospitals, by type of control, region, and State: 1951 (bedside nursing personnel)

Table 56a. Nurse-patient ratios in tuberculosis hospitals, by type of control, region, and State: 1959 (bedside nursing personnel)

Table 56b. Nurse-patient ratios in tuberculosis hospitals, by type of control, region, and State: 1959 (total nursing personnel)

Table 57. Supervisory-staff level nursing personnel ratios in hospitals, by type and control of hospital, by region and State: 1959

Table 48.—Professional nursing personnel in hospitals, by type of position: selected years 1944–1964 [1]

Year	Hospitals reporting	Type of position							
		All positions [2]	Administrative	Instructors and inservice education personnel	Supervisors and assistant supervisors	Head nurses and assistant head nurses	General duty nurses	Anesthetists and other nurses	Private duty nurses
1944 Total	6, 611	123, 307	4, 405	3, 826	18, 722	23, 658	64, 741	7, 955	23, 949
Full time	—	. . .	. . .	. . .	. . .	. . .	56, 766	. . .	. . .
Part time	—	. . .	. . .	. . .	. . .	. . .	7, 975	. . .	. . .
1945 Total	6, 511	144, 724	8, 488	4, 174	18, 786	26, 769	80, 728	5, 779	25, 277
Full time	—	. . .	. . .	. . .	. . .	. . .	68, 902	. . .	. . .
Part time	—	. . .	. . .	. . .	. . .	. . .	11, 826	. . .	. . .
1946 Total	6, 280	146, 602	8, 423	4, 174	18, 295	25, 555	84, 792	5, 363	28, 245
Full time	—	. . .	. . .	. . .	. . .	. . .	71, 447	. . .	. . .
Part time	—	. . .	. . .	. . .	. . .	. . .	13, 345	. . .	. . .
1947 Total	6, 276	167, 354	8, 509	4, 428	18, 801	27, 387	101, 259	6, 970	30, 996
Full time	—	. . .	. . .	. . .	. . .	. . .	86, 218	. . .	. . .
Part time	—	. . .	. . .	. . .	. . .	. . .	15, 041	. . .	. . .
1948 Total	6, 335	196, 120	9, 468	5, 207	20, 436	29, 516	121, 318	10, 175	33, 939
Full time	—	. . .	. . .	. . .	. . .	. . .	104, 041	. . .	. . .
Part time	—	. . .	. . .	. . .	. . .	. . .	17, 277	. . .	. . .
1949 Total	6, 572	199, 295	9, 281	5, 259	20, 970	31, 352	125, 000	7, 433	33, 330
Full time	—	. . .	. . .	. . .	. . .	. . .	106, 508	. . .	. . .
Part time	—	. . .	. . .	. . .	. . .	. . .	18, 492	. . .	. . .
1950 Total	6, 430	205, 389	9, 725	5, 533	21, 834	32, 385	128, 246	7, 666	32, 739
Full time	—	. . .	. . .	. . .	. . .	. . .	108, 603	. . .	. . .
Part time	—	. . .	. . .	. . .	. . .	. . .	19, 643	. . .	. . .
1951 Total	6, 637	216, 047	9, 844	5, 960	22, 781	34, 740	134, 793	7, 929	31, 807
Full time	—	. . .	. . .	. . .	. . .	. . .	111, 021	. . .	. . .
Part time	—	. . .	. . .	. . .	. . .	. . .	23, 772	. . .	. . .
1952 Total	6, 665	225, 613	10, 166	6, 259	22, 997	35, 839	142, 045	8, 307	31, 013
Full time	—	. . .	. . .	. . .	. . .	. . .	112, 324	. . .	. . .
Part time	—	. . .	. . .	. . .	. . .	. . .	29, 721	. . .	. . .
1953 Total	6, 840	237, 281	10, 557	6, 655	23, 602	37, 689	150, 693	8, 085	29, 300
Full time	—	. . .	. . .	. . .	. . .	. . .	116, 290	. . .	. . .
Part time	—	. . .	. . .	. . .	. . .	. . .	34, 403	. . .	. . .
1954 Total	6, 096	245, 370	10, 106	7, 125	23, 385	38, 757	157, 065	8, 932	29, 813
Full time	—	. . .	. . .	. . .	. . .	. . .	120, 735	. . .	. . .
Part time	—	. . .	. . .	. . .	. . .	. . .	36, 330	. . .	. . .
1955 Total	6, 415	260, 909	11, 130	8, 071	23, 164	41, 981	164, 648	11, 915	30, 661
Full time	—	. . .	. . .	. . .	. . .	. . .	124, 292	. . .	. . .
Part time	—	. . .	. . .	. . .	. . .	. . .	40, 356	. . .	. . .
1956 Total	6, 266	261, 444	10, 875	8, 100	22, 721	41, 969	167, 251	10, 528	27, 400
Full time	—	. . .	. . .	. . .	. . .	. . .	121, 645	. . .	. . .
Part time	—	. . .	. . .	. . .	. . .	. . .	45, 606	. . .	. . .
1957 Total	6, 569	287, 369	13, 138	9, 860	30, 283	45, 886	176, 260	11, 942	30, 796
Full time	—	229, 431	12, 264	8, 749	27, 724	43, 551	127, 024	10, 119	. . .
Part time	—	57, 938	874	1, 111	2, 559	2, 335	49, 236	1, 823	. . .
1958 Total	6, 282	301, 028	12, 796	10, 298	29, 857	47, 467	181, 183	19, 427	41, 504
Full time	—	236, 095	11, 822	9, 070	26, 853	44, 514	128, 065	15, 771	. . .
Part time	—	64, 933	974	1, 228	3, 004	2, 953	53, 118	3, 656	. . .
1959 Total	6, 177	306, 599	12, 690	10, 809	30, 089	47, 364	184, 564	21, 083	63, 863
Full time	—	242, 064	12, 289	9, 614	28, 280	44, 983	129, 462	17, 436	. . .
Part time	—	64, 535	401	1, 195	1, 809	2, 381	55, 102	3, 647	. . .
1962 Total	6, 863	365, 770	17, 750	11, 695	33, 645	57, 140	224, 425	21, 115	. . .
Full time	—	273, 965	16, 230	10, 480	29, 735	53, 150	146, 280	18, 090	. . .
Part time	—	91, 805	1, 520	1, 215	3, 910	3, 990	78, 145	3, 025	. . .
1964 [3] Total	6, 734	382, 308	14, 979	16, 482	33, 846	60, 216	233, 877	22, 908	. . .
Full time	—	283, 521	14, 082	14, 873	30, 221	55, 744	148, 754	19, 847	. . .
Part time	—	98, 787	897	1, 609	3, 625	4, 472	85, 123	3, 061	. . .

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[1] Prior to 1957 the American Hospital Association did not distinguish between full-time and part-time personnel in these categories in its Annual Survey of Hospitals except for general duty nurses. Data include general, tuberculosis, allied special, and psychiatric hospitals, and exclude osteopathic hospitals, nursing homes, and other institutions not listed by the American Hospital Association. Alaska and Hawaii are included for 1962 and 1964 only.

[2] Does not include private duty nurses.

[3] Estimated from sample data.

SOURCES: Tibbitts, Helen G., and Levine, Eugene. Health Manpower Source Book, Section 2—Nursing Personnel. Public Health Service Pub. No. 263. Washington, U.S. Government Printing Office, 1953, p. 71.

American Nurses' Association. Facts About Nursing: A Statistical Summary. New York, The Association, Annual eds.: 1954, p. 20; 1960, pp. 18 and 19; 1961, p. 22; 1962–63, p. 29; and 1965, p. 24.

Table 49.—Nonprofessional nursing personnel in United States hospitals, practical nurses and other: 1941–1959, 1962, and 1964

Year	Total	Practical nurses	Other [1] nonprofessional nursing personnel
1941	137, 171	17, 332	119, 839
1942	142, 151	22, 161	119, 990
1943	175, 677	17, 309	158, 368
1944	174, 341	. . .	. . .
1945	182, 533	. . .	. . .
1946	146, 130	. . .	. . .
1947	161, 247	. . .	. . .
1948	189, 134	. . .	. . .
1949	234, 808	33, 272	201, 536
1950	270, 819	49, 880	220, 939
1951	270, 839	40, 816	230, 023
1952	329, 076	48, 941	280, 135
1953	347, 369	54, 123	293, 246
1954	351, 765	60, 967	290, 798
1955	402, 210	65, 765	336, 445
1956	378, 520	70, 578	307, 942
1957 [2]	462, 947	83, 558	379, 389
1958 [2]	450, 829	86, 687	364, 142
1959 [2] [3]	472, 740	95, 862	376, 878
1962 [2]	526, 825	126, 825	400, 000 (est.)
1964 [2]	. . .	128, 803	. . .

[1] Includes nursing aides, attendants, orderlies, and other auxiliary nursing personnel.

[2] Includes full-time and part-time personnel. The part-time figures include duplication. "Part-time personnel" represents: persons working less than a full workweek, or persons doubling in more than one job (either in one hospital or more than one hospital).

[3] Total includes 815 practical nurses and 989 other nonprofessional nursing personnel for Alaska and Hawaii. Previous years do not include Alaska and Hawaii.

SOURCES: Tibbitts, Helen G., and Levine, Eugene. Health Manpower Source Book, Section 2—Nursing Personnel. Public Health Service Pub. No. 263. Washington, U.S. Government Printing Office, 1953, p. 72.

American Nurses Association. Facts About Nursing: A Statistical Summary. New York, The Association. Annual eds.: 1953, p. 115; 1954, p. 130; 1961, p. 185; 1964, p. 187: and 1965, p. 181.

U.S. Department of Health, Education, and Welfare, Public Health Service. Toward Quality in Nursing: Needs and Goals. Report of the Surgeon General's Consultant Group on Nursing. Public Health Service Pub. No. 992. Washington, U.S. Government Printing Office, 1963, p. 6.

Table 50.—Practical nurses and other nonprofessional nursing personnel[1] in hospitals, by region and State: 1949, 1954, 1959

Region and State	1949		1954		1959	
	Practical nurses	Other non-professional personnel	Practical nurses	Other non-professional personnel	Practical nurses	Other non-professional personnel
United States	33, 272	201, 536	60, 967	290, 798	95, 862	376, 878
Northeast	10, 099	58, 854	19, 974	88, 947	25, 051	111, 651
North Central	7, 721	61, 127	13, 708	86, 613	23, 173	117, 163
South	11, 004	50, 174	18, 705	74, 195	30, 266	96, 523
West	4, 448	31, 381	8, 580	41, 043	17, 372	51, 541
Alabama	451	2, 785	777	3, 991	1, 510	5, 122
Alaska	. . .	. . .	. . .	. . .	122	346
Arizona	36	993	296	1, 565	662	2, 412
Arkansas	506	1, 748	414	3, 055	934	3, 329
California	2, 167	16, 078	4, 078	23, 834	9, 287	29, 649
Colorado	324	6, 348	729	3, 661	1, 285	4, 392
Connecticut	247	2, 985	5, 538	7, 830	920	5, 418
Delaware	23	519	33	884	100	1, 132
District of Columbia	220	2, 610	386	2, 142	717	3, 919
Florida	522	3, 377	1, 399	4, 577	2, 481	7, 687
Georgia	759	3, 742	1, 220	5, 365	1, 498	6, 733
Hawaii	—	—	—	—	693	643
Idaho	158	415	336	467	701	679
Illinois	1, 156	12, 581	2, 495	15, 630	3, 408	21, 694
Indiana	478	3, 992	697	6, 656	1, 149	9, 903
Iowa	358	2, 909	478	4, 162	689	5, 659
Kansas	220	3, 229	269	4, 699	569	6, 177
Kentucky	882	3, 036	1, 076	4, 411	1, 388	6, 018
Louisiana	501	3, 015	1, 118	4, 505	1, 834	5, 611
Maine	110	998	184	1, 279	411	1, 802
Maryland	822	3, 790	916	5, 989	1, 854	7, 627
Massachusetts	379	8, 542	1, 068	12, 236	3, 584	13, 686
Michigan	1, 485	9, 620	3, 021	13, 658	4, 902	17, 704
Minnesota	1, 086	3, 905	1, 484	6, 506	2, 238	8, 536
Mississippi	304	1, 500	478	2, 918	1, 215	2, 694
Missouri	897	5, 525	1, 425	7, 144	2, 252	10, 445
Montana	96	669	316	1, 084	422	1, 400
Nebraska	317	2, 107	454	2, 828	576	4, 142
Nevada	12	181	67	273	155	426
New Hampshire	113	532	240	907	314	1, 317
New Jersey	706	4, 885	1, 235	8, 724	2, 554	12, 227
New Mexico	110	565	238	1, 155	385	1, 564
New York	7, 327	29, 265	9, 316	38, 053	11, 627	54, 321
North Carolina	670	3, 152	1, 242	5, 811	1, 588	6, 785
North Dakota	80	737	107	1, 056	217	1, 749
Ohio	781	10, 931	2, 007	16, 421	5, 368	20, 805
Oklahoma	637	2, 130	1, 125	3, 292	1, 248	4, 517
Oregon	465	1, 592	485	3, 038	739	3, 168
Pennsylvania	994	10, 263	2, 038	17, 647	4, 796	20, 318
Rhode Island	151	985	178	1, 678	582	1, 792
South Carolina	202	1, 220	485	2, 673	790	3, 162
South Dakota	73	823	156	1, 154	210	1, 507
Tennessee	1, 018	3, 243	1, 662	4, 649	2, 439	6, 554
Texas	2, 496	8, 519	4, 978	11, 222	7, 907	14, 460
Utah	160	720	211	1, 349	359	1, 562
Vermont	72	399	177	593	263	770
Virginia	790	3, 737	1, 115	5, 614	1, 946	7, 473
Washington	865	3, 271	1, 774	3, 912	2, 444	4, 543
West Virginia	201	2, 051	281	3, 097	817	3, 700
Wisconsin	790	4, 768	1, 115	6, 699	1, 595	8, 842
Wyoming	55	549	50	705	118	757

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[1] Includes nursing aides, orderlies, attendants, and other auxiliary nursing personnel.

SOURCE: American Nurses' Association. Facts About Nursing: A Statistical Summary. New York, The Association. Annual eds.: 1950, p. 78; 1955–56, p. 143; and 1961, p. 186.

Table 51.—Nurse-patient ratios in general and allied special hospitals, by type of control, region, and State: 1951 (bedside nursing personnel)

Region and State	Nursing personnel per 100 patients [1] in hospitals by type of control											
	All types			Federal [2]			Other government			Nongovernment		
	Total	Professional [3]	Nonprofessional [4]	Total	Professional [3]	Nonprofessional [4]	Total	Professional [3]	Nonprofessional [4]	Total	Professional [3]	Nonprofessional [4]
United States	54	22	32	39	13	26	49	16	33	62	28	34
Northeast	51	24	27	42	15	27	42	13	29	56	30	26
North Central	56	22	34	43	15	28	51	18	33	60	25	35
South	54	18	36	39	12	27	55	18	37	65	23	42
West	60	26	34	35	12	23	52	18	34	80	40	40
Alabama	71	24	47	53	16	37	86	36	50	72	21	51
Arizona	61	25	36	54	24	30	50	17	33	73	32	41
Arkansas	52	15	37	31	11	20	90	25	65	61	16	45
California	57	26	31	29	11	18	48	15	33	90	49	41
Colorado	57	20	37	45	9	36	67	31	36	65	27	38
Connecticut	58	37	21	51	28	23	49	24	25	59	38	21
Delaware	60	29	31	47	19	28	—	—	—	63	31	32
District of Columbia	51	23	28	39	14	25	39	17	22	72	37	35
Florida	64	29	35	30	15	15	76	30	46	82	39	43
Georgia	61	18	43	48	12	36	66	21	45	65	19	46
Idaho	61	26	35	45	18	27	92	33	59	58	26	32
Illinois	48	19	29	44	13	31	33	11	22	53	23	30
Indiana	53	23	30	24	10	14	63	24	39	57	26	31
Iowa	58	26	32	50	26	24	52	20	32	61	28	33
Kansas	51	17	34	33	9	24	70	22	48	55	20	35
Kentucky	52	19	33	22	10	12	65	20	45	71	25	46
Louisiana	54	17	37	40	12	28	47	13	34	71	25	46
Maine	53	32	21	38	19	19	43	18	25	54	34	20
Maryland	50	16	34	51	10	41	31	10	21	61	24	37
Massachusetts	49	25	24	44	15	29	38	16	22	56	33	23
Michigan	64	23	41	47	15	32	56	17	39	72	29	43
Minnesota	62	28	34	45	22	23	67	33	34	63	27	36
Mississippi	48	16	32	51	18	33	36	10	26	53	18	35
Missouri	50	15	35	38	14	24	41	11	30	56	18	38
Montana	48	19	29	55	20	35	37	16	21	48	19	29
Nebraska	64	24	40	56	25	31	54	18	36	67	25	42
Nevada	66	32	34	51	25	26	64	26	38	85	54	31
New Hampshire	64	36	28	84	15	69	53	30	23	62	41	21
New Jersey	44	23	21	27	12	15	21	7	14	57	32	25
New Mexico	65	27	38	59	29	30	68	25	43	65	27	38
New York	57	22	35	46	19	27	52	13	39	61	27	34
North Carolina	51	20	31	21	7	14	58	22	36	59	24	35
North Dakota	53	23	30	59	29	30	57	19	38	51	22	29
Ohio	63	27	36	53	18	35	57	21	36	67	30	37
Oklahoma	52	14	38	42	17	25	53	14	39	53	12	41
Oregon	73	34	39	53	23	30	61	29	32	78	36	42
Pennsylvania	44	24	20	37	10	27	25	11	14	49	29	20
Rhode Island	45	25	20	45	18	27	14	1	13	62	41	21
South Carolina	47	19	28	33	13	20	50	23	27	58	22	36
South Dakota	51	19	32	46	20	26	69	34	35	50	18	32
Tennessee	54	15	39	42	12	30	59	14	45	61	18	43
Texas	61	16	45	46	11	35	55	14	41	74	20	54
Utah	75	31	44	45	24	21	94	31	63	76	32	44
Vermont	57	36	21	48	22	26	—	—	—	58	38	20
Virginia	45	17	28	28	10	18	55	21	34	58	23	35
Washington	64	28	36	34	11	23	62	26	36	84	40	44
West Virginia	52	19	33	49	17	32	42	21	21	53	19	34
Wisconsin	59	25	34	45	18	27	56	24	32	62	26	36
Wyoming	65	29	36	42	14	28	74	35	39	89	47	42

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[1] Average daily patient census for the most recent 12-month period for which data were available at the time the schedule was completed.

[2] Does not include hospitals operated by the Bureau of Indian Affairs which are included with "other government" hospitals.

[3] Includes bedside general duty nurses working full time plus one-half of those working part time as of the day on which the schedule was completed.

[4] Includes practical nurses, attendants, nursing aides, and orderlies, as of the day on which the schedule was completed.

SOURCE: Tibbitts, Helen G., and Levine, Eugene. Health Manpower Source Book, Section 2—Nursing Personnel. Public Health Service Pub. No. 263. Washington, U.S. Government Printing Office, 1953, p. 74.

Table 52a.—Nurse-patient ratios in general and allied special hospitals, by type of control, region, and State: 1959 (bedside nursing personnel)

Region and State	Nursing personnel per 100 patients [1] in hospitals by type of control											
	All types			Federal			Other government			Nongovernment		
	Total	Professional [2]	Nonprofessional[3]	Total	Professional [2]	Nonprofessional[3]	Total	Professional [2]	Nonprofessional[3]	Total	Professional [2]	Nonprofessional[3]
United States	79	24	55	49	13	36	76	17	59	88	28	60
Northeast	75	27	48	44	12	32	70	14	56	81	32	49
North Central	78	22	56	41	13	28	71	19	52	87	25	62
South	80	19	61	54	14	40	83	16	67	89	22	67
West	85	28	57	51	13	38	81	21	60	103	36	67
Alabama	94	22	72	69	20	49	101	22	79	99	23	76
Alaska	63	22	41	59	20	39	54	25	29	81	31	50
Arizona	91	29	62	59	14	45	76	22	54	116	41	75
Arkansas	80	14	66	40	15	25	92	11	81	85	15	70
California	85	27	58	47	11	36	76	18	58	108	41	67
Colorado	79	23	56	55	13	42	96	34	62	84	24	60
Connecticut	72	33	39	38	12	26	35	14	21	81	38	43
Delaware	66	20	46	53	14	39	21	—	21	86	29	57
District of Columbia	78	27	51	57	15	42	75	20	55	101	40	61
Florida	96	25	71	61	13	48	102	23	79	102	32	70
Georgia	88	19	69	64	15	49	98	20	78	89	20	69
Hawaii	79	32	47	61	15	46	59	16	43	108	58	50
Idaho	100	28	72	47	14	33	121	31	90	102	30	72
Illinois	79	26	53	44	12	32	96	27	69	86	30	56
Indiana	77	23	54	43	15	28	83	22	61	79	24	55
Iowa	61	20	41	42	17	25	27	6	21	83	29	54
Kansas	81	20	61	40	9	31	103	24	79	90	23	67
Kentucky	92	21	71	58	16	42	102	18	84	96	23	73
Louisiana	77	14	63	44	12	32	65	7	58	96	22	74
Maine	74	29	45	20	13	7	53	15	38	78	31	47
Maryland	77	21	56	55	14	41	57	10	47	92	28	64
Massachusetts	75	30	45	50	14	36	62	17	45	84	37	47
Michigan	77	19	58	39	12	27	58	14	44	94	23	71
Minnesota	89	31	58	41	17	24	88	29	59	94	33	61
Mississippi	73	14	59	48	11	37	80	11	69	81	19	62
Missouri	78	18	60	37	10	27	87	18	69	85	20	65
Montana	82	25	57	52	21	31	35	11	24	90	26	64
Nebraska	82	24	58	47	18	29	78	15	63	91	28	63
Nevada	91	29	62	61	17	44	90	26	64	120	47	73
New Hampshire	82	35	47	54	14	40	70	32	38	88	39	49
New Jersey	79	30	49	59	12	47	60	13	47	88	38	50
New Mexico	78	21	57	60	16	44	78	13	65	94	27	67
New York	78	21	57	41	11	30	80	13	67	84	27	57
North Carolina	73	23	50	54	17	37	80	24	56	75	24	51
North Dakota	80	22	58	62	21	41	67	—	67	82	22	60
Ohio	90	25	65	32	10	22	93	24	69	95	26	69
Oklahoma	82	13	69	56	17	39	83	7	76	92	13	79
Oregon	90	29	61	46	17	29	93	24	69	97	32	65
Pennsylvania	70	30	40	45	11	34	60	21	39	74	33	41
Rhode Island	75	30	45	41	16	25	25	(4)	25	98	43	55
South Carolina	67	18	49	43	11	32	80	22	58	71	19	52
South Dakota	66	17	49	49	19	30	79	26	53	70	16	54
Tennessee	83	15	68	47	12	35	96	15	81	94	16	78
Texas	84	15	69	56	13	43	83	12	71	97	18	79
Utah	88	26	62	55	12	43	102	25	77	101	33	68
Vermont	88	41	47	. . .	. . .	. . .	—	—	—	89	41	48
Virginia	72	20	52	53	13	40	68	17	51	80	24	56
Washington	91	31	60	51	15	36	108	33	75	106	39	67
West Virginia	74	20	54	41	13	28	85	32	53	81	21	60
Wisconsin	75	22	53	34	10	24	85	28	57	78	23	55
Wyoming	95	32	63	32	12	20	106	40	66	106	27	79

[1] See Table 51, footnote 1.
[2] Includes staff nurses working full time plus one-half of those working part time as of the day on which the schedule was completed.
[3] Includes practical nurses, attendants, nursing aides, orderlies, and other auxiliary nursing personnel as of the day on which the schedule was completed.
[4] Less than 0.5.

SOURCE: American Hospital Association, Chicago, Ill. Unpublished data.

Table 52b.—Nurse-patient ratios in general and allied special hospitals by type of control, region, and State: 1959 (total nursing personnel [1])

Region and State	Nursing personnel per 100 patients [2] by type of control											
	All types			Federal			Other government			Nongovernment		
	Total	Professional [3]	Nonprofessional[3]	Total	Professional [3]	Nonprofessional[3]	Total	Professional [3]	Nonprofessional[3]	Total	Professional [3]	Nonprofessional[3]
United States	98	42	56	57	21	36	93	33	60	110	51	59
Northeast	95	46	49	52	19	33	84	28	56	104	55	49
North Central	91	38	53	47	19	28	86	33	53	107	45	62
South	103	39	64	62	23	39	101	33	68	111	43	68
West	107	49	58	60	22	38	99	39	60	132	66	66
Alabama	113	41	72	80	30	50	123	43	80	118	43	75
Alaska	79	37	42	67	27	40	100	71	29	123	72	51
Arizona	108	46	62	69	25	44	88	33	55	140	64	76
Arkansas	99	33	66	48	22	26	112	30	82	108	37	71
California	107	49	58	56	20	36	94	35	59	138	71	67
Colorado	96	40	56	63	22	41	120	57	63	103	43	60
Connecticut	93	54	39	45	18	27	45	24	21	105	62	43
Delaware	82	36	46	61	23	38	23	3	20	110	53	57
District of Columbia	94	42	52	66	24	42	84	29	55	125	64	61
Florida	119	48	71	73	25	48	123	43	80	131	61	70
Georgia	105	36	69	76	26	50	116	38	78	108	40	68
Hawaii	100	53	47	69	24	45	70	26	44	146	95	51
Idaho	135	62	73	59	26	33	157	66	91	142	69	73
Illinois	96	43	53	49	17	32	119	49	70	107	50	57
Indiana	93	39	54	49	21	28	102	41	61	94	40	54
Iowa	76	35	41	49	24	25	32	12	20	105	51	54
Kansas	101	40	61	48	17	31	128	50	78	114	47	67
Kentucky	111	40	71	67	25	42	123	38	85	116	42	74
Louisiana	93	30	63	50	32	18	76	19	57	119	44	75
Maine	101	56	45	26	19	7	72	33	39	107	60	47
Maryland	96	43	53	67	26	41	72	26	46	115	50	65
Massachusetts	99	54	45	59	23	36	79	34	45	112	65	47
Michigan	93	35	58	45	18	27	68	23	45	115	44	71
Minnesota	110	52	58	48	24	24	112	52	60	157	74	83
Mississippi	94	34	60	60	23	37	103	34	69	104	41	63
Missouri	92	32	60	42	15	27	102	32	70	101	36	65
Montana	109	51	58	61	30	31	38	15	23	120	56	64
Nebraska	102	45	57	55	25	30	109	44	65	114	50	64
Nevada	108	46	62	74	30	44	106	42	64	142	68	74
New Hampshire	111	64	47	65	26	39	88	48	40	122	72	50
New Jersey	98	49	49	66	19	47	72	24	48	110	60	50
New Mexico	96	38	58	71	27	44	101	36	65	116	49	67
New York	96	40	56	48	18	30	94	26	68	106	49	57
North Carolina	92	42	50	62	24	38	102	45	57	96	45	51
North Dakota	100	41	59	74	33	41	78	11	67	103	42	61
Ohio	108	42	66	37	15	22	110	40	70	114	45	69
Oklahoma	102	32	70	68	29	39	104	28	76	113	34	79
Oregon	116	55	61	53	24	29	116	47	69	127	62	65
Pennsylvania	88	47	41	53	19	34	77	38	39	93	51	42
Rhode Island	93	49	44	48	23	25	28	3	25	123	68	55
South Carolina	84	34	50	53	22	31	98	40	58	88	36	52
South Dakota	87	38	49	59	29	30	106	51	55	94	40	54
Tennessee	100	32	68	55	20	35	112	30	82	116	38	78
Texas	103	34	69	64	21	43	102	31	71	121	42	79
Utah	106	44	62	62	19	43	119	42	77	125	56	69
Vermont	120	72	48	—	—	—	33	33	—	120	72	48
Virginia	90	38	52	63	22	41	83	32	51	101	45	56
Washington	115	56	59	59	23	36	133	57	76	139	71	68
West Virginia	92	38	54	48	19	29	104	50	54	101	41	60
Wisconsin	94	41	53	40	16	24	100	43	57	99	43	56
Wyoming	111	48	63	39	19	20	125	58	67	122	43	79

[1] Includes total professional nursing personnel, total practical nursing personnel, and total auxiliary nursing personnel on all units.
[2] See table 51, footnote 1.
[3] Includes supervisory and nonbedside personnel in addition to the professional and nonprofessional staff explained in table 52a, footnotes 2 and 3.

SOURCE: American Hospital Association, Chicago, Ill. Unpublished data.

Table 53.—Nurse-patient ratios in nervous and mental hospitals, by type of control, region, and State: 1951 (bedside nursing personnel)

Region and State	Nursing personnel per 100 patients [1] in hospitals by type of control											
	All types			Federal [2]			Other government			Nongovernment		
	Total	Professional [3]	Nonprofessional [4]	Total	Professional [3]	Nonprofessional [4]	Total	Professional [3]	Nonprofessional [4]	Total	Professional [3]	Nonprofessional [4]
United States	13.3	0.6	12.7	26.2	2.9	23.3	11.5	0.3	11.2	33.9	4.2	29.7
Northeast	13.5	0.7	12.8	26.7	3.5	23.2	12.1	0.5	11.6	34.1	4.7	29.4
North Central	12.4	0.4	12.0	28.0	2.5	25.5	10.7	0.2	10.5	30.4	3.8	26.6
South	13.1	0.6	12.5	25.0	2.7	22.3	10.4	0.2	10.2	41.8	3.9	37.9
West	16.0	1.0	15.0	25.5	3.1	22.4	14.6	0.7	13.9	32.9	4.1	28.8
Alabama	15.3	1.4	13.9	28.2	5.2	23.0	10.4	(5)	10.4	31.9	—	31.9
Arizona	12.2	0.1	12.1	—	—	—	12.1	0.1	12.0	40.0	—	40.0
Arkansas	18.9	0.9	18.0	28.4	2.6	25.8	14.7	0.1	14.6	—	—	—
California	17.2	1.0	16.2	25.0	3.2	21.8	15.8	0.7	15.1	36.4	4.7	31.7
Colorado	14.7	0.6	14.1	28.1	2.3	25.8	12.5	0.3	12.2	22.0	.5	21.5
Connecticut	14.7	0.5	14.2	—	—	—	11.7	0.3	11.4	52.6	3.4	49.2
Delaware	13.3	0.6	12.7	—	—	—	13.3	0.6	12.7	—	—	—
District of Columbia	17.4	0.3	17.1	17.5	0.3	17.2	16.9	0.8	16.1	—	—	—
Florida	12.0	0.3	11.7	—	—	—	11.6	0.2	11.4	32.9	5.0	27.9
Georgia	13.9	1.0	12.9	38.6	7.2	31.4	9.6	0.2	9.4	77.9	2.3	75.6
Idaho	17.1	0.2	16.9	—	—	—	17.1	0.2	16.9	—	—	—
Illinois	9.7	0.5	9.2	27.8	4.0	23.8	7.6	0.1	7.5	30.0	4.4	25.6
Indiana	10.5	0.3	10.2	26.3	1.6	24.7	8.0	0.1	7.9	38.0	4.0	34.0
Iowa	13.1	0.5	12.6	25.6	2.3	23.3	10.7	0.1	10.6	16.0	.3	15.7
Kansas	20.1	0.5	19.6	53.3	1.1	52.2	14.4	0.2	14.2	95.0	15.0	80.0
Kentucky	14.7	0.9	13.8	24.0	1.9	22.1	11.1	0.4	10.7	39.5	9.8	29.7
Louisiana	8.3	0.1	8.2	—	—	—	7.8	—	7.8	30.9	3.5	27.4
Maine	12.9	1.2	11.7	28.7	7.3	21.4	9.8	(5)	9.8	50.0	13.6	36.4
Maryland	15.8	0.9	14.9	28.3	3.6	24.7	12.5	0.3	12.2	26.4	2.1	24.3
Massachusetts	14.7	0.6	14.1	25.6	3.6	22.0	12.9	(5)	12.9	46.9	15.2	31.7
Michigan	13.5	0.4	13.1	24.8	1.1	23.7	12.3	0.2	12.1	24.7	4.7	20.0
Minnesota	14.2	0.6	13.6	24.6	2.7	21.9	12.3	0.1	12.2	57.9	16.0	41.9
Mississippi	13.5	0.5	13.0	23.0	2.7	20.3	11.2	0.1	11.1	57.5	4.3	53.2
Missouri	13.3	0.2	13.1	—	—	—	13.0	0.2	12.8	20.3	1.1	19.2
Montana	11.9	—	11.9	—	—	—	11.9	—	11.9	—	—	—
Nebraska	16.1	0.2	15.9	—	—	—	15.8	0.1	15.7	31.2	3.8	27.4
Nevada	11.0	0.3	10.7	—	—	—	11.0	0.3	10.7	—	—	—
New Hampshire	12.1	—	12.1	—	—	—	12.1	—	12.1	—	—	—
New Jersey	12.5	1.1	11.4	26.2	3.4	22.8	10.7	0.7	10.0	25.0	4.4	20.6
New Mexico	20.5	0.2	20.3	—	—	—	19.5	0.1	19.4	58.0	3.2	54.8
New York	14.1	0.6	13.5	24.6	2.2	22.4	13.1	0.4	12.7	45.9	3.7	42.2
North Carolina	12.1	0.4	11.7	—	—	—	11.1	0.2	10.9	50.0	7.1	42.9
North Dakota	7.9	—	7.9	—	—	—	7.9	—	7.9	—	—	—
Ohio	12.4	1.1	12.1	25.1	2.0	23.1	11.2	.2	11.0	39.0	2.8	36.2
Oklahoma	10.6	(5)	10.6	—	—	—	10.6	(5)	10.6	18.8	—	18.8
Oregon	12.6	0.6	12.0	18.4	2.6	15.8	11.6	0.2	11.4	14.4	1.7	12.7
Pennsylvania	12.2	1.1	11.1	31.7	4.9	26.8	10.5	0.7	9.8	22.3	4.2	18.1
Rhode Island	9.4	0.7	8.7	—	—	—	8.3	0.5	7.8	33.8	5.2	28.6
South Carolina	6.8	0.1	6.7	—	—	—	6.6	(5)	6.6	50.0	14.3	35.7
South Dakota	11.8	0.8	11.0	26.2	3.0	23.2	7.9	0.2	7.7	—	—	—
Tennessee	10.1	0.4	9.7	27.4	2.7	24.7	7.3	0.1	7.2	53.3	2.9	50.4
Texas	13.8	0.6	13.2	26.4	2.8	23.6	11.2	0.2	11.0	55.2	3.8	51.4
Utah	16.4	0.1	16.3	—	—	—	16.4	0.1	16.3	—	—	—
Vermont	13.0	(5)	13.0	—	—	—	10.7	0.1	10.6	18.9	—	18.9
Virginia	13.1	.8	12.3	28.6	4.3	24.3	9.9	0.2	9.7	63.2	6.0	57.2
Washington	13.8	2.0	11.8	27.9	3.9	24.0	11.9	1.7	10.2	71.5	15.7	55.8
West Virginia	8.7	0.1	8.6	—	—	—	8.6	0.1	8.5	16.7	—	16.7
Wisconsin	13.6	0.9	12.7	27.9	3.5	24.4	11.4	0.5	10.9	36.3	3.6	32.7
Wyoming	18.0	1.4	16.6	28.5	3.4	25.1	11.1	0.1	11.0	—	—	—

[1] See table 51, footnote1. [2] No hospitals of this type operated by the Bureau of Indian Affairs; hence footnote 2, table 46 does not apply. [3] See table, 51 footnote 3. [4] See table 51, footnote 4. [5] Less than 0.05.

SOURCE: Tibbitts, Helen G., and Levine, Eugene. Health Manpower Source Book, Section 2—Nursing Personnel. Public Health Service Pub. No. 263. Washington, U.S. Government Printing Office, 1953, p. 76.

Table 54a.—Nurse-patient ratios in psychiatric hospitals, by type of control, region and State: 1959 (bedside nursing personnel)

Region and State	Nursing personnel per 100 patients[1] in hospitals by type of control											
	All types			Federal			Other government			Nongovernment		
	Total	Professional[2]	Nonprofessional[3]	Total	Professional[2]	Nonprofessional[3]	Total	Professional[2]	Nonprofessional[3]	Total	Professional[2]	Nonprofessional[3]
United States	18.6	0.7	17.9	28.0	3.1	24.9	17.2	0.4	16.8	31.2	2.6	28.6
Northeast	18.4	0.7	17.7	28.1	3.5	24.6	17.4	0.4	17.0	34.7	4.2	30.5
North Central	18.2	0.5	17.7	28.2	2.2	26.0	16.6	0.3	16.3	37.7	2.6	35.1
South	17.7	0.6	17.1	27.8	3.2	24.6	15.5	0.2	15.3	25.2	1.0	24.2
West	21.5	1.2	20.3	28.1	3.6	24.5	20.3	0.9	19.4	44.1	7.7	36.4
Alabama	17.0	0.4	16.6	25.6	1.5	24.1	13.6	—	13.6	52.5	—	52.5
Alaska	—	—	—	—	—	—	—	—	—	—	—	—
Arizona	23.4	1.5	21.9	—	—	—	22.9	1.0	21.9	45.9	24.3	21.6
Arkansas	20.7	0.7	20.0	31.3	2.6	28.7	16.9	(4)	16.9	—	—	—
California	22.0	1.4	20.6	28.7	3.9	24.8	20.9	1.0	19.9	55.5	11.2	44.3
Colorado	19.2	0.9	18.3	27.1	2.1	25.0	17.6	0.8	16.8	41.4	1.6	39.8
Connecticut	20.4	0.8	19.6	—	—	—	20.6	0.7	19.9	15.6	2.7	12.9
Delaware	18.7	0.3	18.4	—	—	—	18.7	0.3	18.4	—	—	—
District of Columbia	18.5	0.4	18.1	—	—	—	—	—	—	18.5	0.4	18.1
Florida	95.1	13.1	82.0	—	—	—	—	—	—	95.1	13.1	82.0
Georgia	14.3	0.9	13.4	32.5	6.4	26.1	11.2	0.1	11.1	77.3	—	77.3
Hawaii	17.2	1.0	16.2	—	—	—	17.2	1.0	16.2	—	—	—
Idaho	23.5	0.4	23.1	—	—	—	23.5	0.4	23.1	—	—	—
Illinois	12.4	0.5	11.9	27.0	2.3	24.7	10.7	0.3	10.4	9.3	—	9.3
Indiana	21.8	0.7	21.1	29.7	2.6	27.1	19.8	0.3	19.5	71.7	9.3	62.4
Iowa	24.4	1.0	23.4	28.8	2.3	26.5	22.2	0.4	21.8	26.4	1.2	25.2
Kansas	29.2	0.8	28.4	40.7	1.0	39.7	26.5	0.5	26.0	61.8	13.2	48.6
Kentucky	18.0	1.2	16.8	23.5	2.8	20.7	16.0	0.6	15.4	29.4	4.7	24.7
Louisiana	15.8	0.5	15.3	—	—	—	15.5	0.5	15.0	26.9	1.2	25.7
Maine	18.9	1.3	17.6	30.9	8.5	22.4	16.7	—	16.7	40.0	—	40.0
Maryland	22.5	0.7	21.8	27.0	2.8	24.2	20.7	0.3	20.4	41.1	1.5	39.6
Massachusetts	21.3	0.7	20.6	28.1	2.7	25.4	19.7	0.1	19.6	65.3	23.2	42.1
Michigan	18.5	0.4	18.1	24.2	0.5	23.7	17.7	0.4	17.3	31.0	1.1	29.9
Minnesota	15.6	0.6	15.0	26.7	3.0	23.7	14.5	0.3	14.2	44.4	3.7	40.7
Mississippi	18.0	0.8	17.2	30.5	4.1	26.4	15.5	0.2	15.3	110.0	—	110.0
Missouri	19.9	0.4	19.5	42.7	3.4	39.3	18.4	0.1	18.3	35.0	3.7	31.3
Montana	17.5	—	17.5	—	—	—	17.5	—	17.5	—	—	—
Nebraska	20.4	0.3	20.1	—	—	—	20.4	0.3	20.1	—	—	—
Nevada	...	...	...	—	—	—	...	...	...	—	—	—
New Hampshire	13.4	0.1	13.3	—	—	—	13.4	0.1	13.3	—	—	—
New Jersey	20.8	0.9	19.9	25.4	2.6	22.8	20.2	0.8	19.4	30.6	1.6	29.0
New Mexico	34.3	0.8	33.5	—	—	—	32.4	0.8	31.6	65.0	—	65.0
New York	17.6	0.5	17.1	25.7	2.7	23.0	17.0	0.4	16.6	42.3	2.4	39.9
North Carolina	20.3	1.0	19.3	42.5	6.0	36.5	16.2	0.1	16.1	53.6	4.9	48.7
North Dakota	16.9	—	16.9	—	—	—	17.1	—	17.1	—	—	—
Ohio	18.9	0.6	18.3	24.3	2.5	21.8	17.2	0.2	17.0	50.0	0.6	49.4
Oklahoma	19.1	(4)	19.1	—	—	—	18.8	—	18.8	43.5	3.2	40.3
Oregon	17.3	1.0	16.3	25.7	4.4	21.3	15.9	0.4	15.5	22.4	3.1	19.3
Pennsylvania	17.1	1.1	16.0	32.9	5.1	27.8	15.0	0.6	14.4	34.7	3.8	30.9
Rhode Island	18.0	0.6	17.4	—	—	—	18.2	0.6	17.6	7.0	5.2	1.8
South Carolina	11.3	0.1	11.2	—	—	—	11.1	—	11.1	48.3	13.8	34.5
South Dakota	14.4	0.5	13.9	—	—	—	14.4	0.5	13.9	—	—	—
Tennessee	16.5	1.1	15.4	25.4	4.0	21.4	13.7	0.5	13.2	72.1	0.9	71.2
Texas	17.9	0.4	17.5	24.8	2.1	22.7	16.1	0.1	16.0	45.9	1.4	44.5
Utah	22.6	0.3	22.3	—	—	—	22.6	0.3	22.3	—	—	—
Vermont	24.0	—	24.0	—	—	—	22.3	—	22.3	28.0	—	28.0
Virginia	18.0	0.7	17.3	26.7	3.3	23.4	16.1	0.2	15.9	52.8	4.7	48.1
Washington	22.6	1.1	21.5	26.9	3.4	23.5	21.9	0.7	21.2	41.8	16.4	25.4
West Virginia	12.4	0.2	12.2	—	—	—	12.1	0.2	11.9	48.6	—	48.6
Wisconsin	22.6	0.9	21.7	24.9	2.5	22.4	20.5	0.6	19.9	64.2	3.8	60.4
Wyoming	23.2	1.9	21.3	29.3	3.0	26.3	16.3	0.7	15.6	—	—	—

[1] See Table 51, footnote 1.
[2] See Table 52a, footnote 2.
[3] See Table 52a, footnote 3.
[4] Less than 0.05.

SOURCE: American Hospital Association, Chicago, Ill. Unpublished data.

Table 54b.—Nurse-patient ratios in psychiatric hospitals, by type of control, region, and State: 1959 (total nursing personnel[1])

Region and State	Nursing personnel per 100 patients[2] in hospital by type of control											
	All types			Federal			Other government			Nongovernment		
	Total	Professional[3]	Nonprofessional[3]	Total	Professional[3]	Nonprofessional[3]	Total	Professional[3]	Nonprofessional[3]	Total	Professional[3]	Nonprofessional[3]
United States	20.1	2.2	17.9	30.6	5.7	24.9	18.4	1.6	16.8	37.9	9.2	28.7
Northeast	20.2	2.5	17.7	30.7	6.1	24.6	21.4	1.9	19.5	44.4	13.8	30.6
North Central	19.4	1.8	17.6	30.4	4.4	26.0	19.0	2.0	17.0	44.7	9.6	35.1
South	19.0	1.9	17.1	30.7	6.1	24.6	17.6	1.3	16.3	29.8	5.6	24.2
West	22.9	2.6	20.3	30.7	6.2	24.5	16.3	1.0	15.3	53.3	16.8	36.5
Alabama	19.1	2.5	16.6	32.3	8.1	24.2	14.0	0.4	13.6	55.0	2.5	52.5
Alaska	—	—	—	—	—	—	—	—	—	—	—	—
Arizona	24.3	2.4	21.9	—	—	—	23.3	1.4	21.9	67.6	45.9	21.7
Arkansas	21.8	1.8	20.0	33.5	4.8	28.7	17.6	0.7	16.9	—	—	—
California	23.4	2.8	20.6	31.3	6.5	24.8	22.0	2.2	19.8	65.3	21.1	44.2
Colorado	20.5	2.2	18.3	29.2	4.3	24.9	18.4	1.6	16.8	53.7	13.9	39.8
Connecticut	22.6	3.1	19.5	—	—	—	22.2	2.3	19.9	30.4	17.3	13.1
Delaware	20.8	2.2	18.6	—	—	—	20.8	2.2	18.6	—	—	—
District of Columbia	21.7	3.6	18.1	—	—	—	—	—	—	21.7	3.6	18.1
Florida	106.6	24.6	82.0	—	—	—	—	—	—	106.6	24.6	82.0
Georgia	15.4	1.9	13.5	36.3	10.3	26.0	11.8	0.7	11.1	84.1	6.8	77.3
Hawaii	19.9	3.7	16.2	—	—	—	19.9	3.7	16.2	—	—	—
Idaho	24.3	1.2	23.1	—	—	—	24.3	1.2	23.1	—	—	—
Illinois	13.2	1.3	11.9	28.5	3.8	24.7	11.4	1.1	10.3	10.3	1.1	9.2
Indiana	23.4	2.4	21.0	32.1	4.9	27.2	21.1	1.6	19.5	85.2	22.8	62.4
Iowa	26.1	2.7	23.4	30.2	3.6	26.6	23.4	1.6	21.8	35.3	10.1	25.2
Kansas	32.3	3.9	28.4	51.4	11.6	39.8	28.3	2.3	26.0	70.8	21.5	49.3
Kentucky	19.3	2.4	16.9	25.6	4.9	20.7	16.7	1.2	15.5	38.0	13.3	24.7
Louisiana	16.3	1.0	15.3	—	—	—	15.6	0.6	15.0	38.6	12.9	25.7
Maine	21.0	3.4	17.6	37.1	14.6	22.5	18.1	1.4	16.7	80.0	40.0	40.0
Maryland	23.9	2.0	21.9	28.9	4.7	24.2	21.3	1.0	20.3	51.7	12.1	39.6
Massachusetts	24.3	3.7	20.6	31.8	6.4	25.4	22.5	2.8	19.7	79.5	37.1	42.4
Michigan	19.7	1.5	18.2	26.4	2.7	23.7	18.5	1.2	17.3	37.8	7.9	29.9
Minnesota	16.9	1.9	15.0	28.2	4.5	23.7	15.6	1.5	14.1	66.7	24.1	42.6
Mississippi	18.7	1.5	17.2	32.5	6.1	26.4	16.0	0.7	15.3	120.0	10.0	110.0
Missouri	20.7	1.1	19.6	45.5	6.3	39.2	18.9	0.6	18.3	41.0	9.7	31.3
Montana	18.8	1.4	17.4	—	—	—	18.8	1.4	17.4	—	—	—
Nebraska	22.2	2.0	20.2	—	—	—	22.2	2.0	20.2	—	—	—
Nevada	—	—	—	—	—	—	—	—	—	—	—	—
New Hampshire	15.4	2.2	13.2	—	—	—	15.4	2.2	13.2	—	—	—
New Jersey	22.2	2.4	19.8	27.3	4.6	22.7	21.5	2.1	19.4	36.7	7.7	29.0
New Mexico	36.1	2.6	33.5	—	—	—	32.7	1.1	31.6	91.7	26.7	65.0
New York	19.1	2.0	17.1	27.3	4.3	23.0	18.4	1.9	16.5	50.7	10.6	40.1
North Carolina	22.5	3.1	19.4	45.4	8.9	36.5	18.0	2.0	16.0	61.6	12.9	48.7
North Dakota	18.3	1.1	17.2	—	—	—	18.3	1.1	17.2	—	—	—
Ohio	19.8	1.5	18.3	25.4	3.5	21.9	18.1	1.1	17.0	54.2	4.8	49.4
Oklahoma	20.1	1.1	19.0	—	—	—	19.8	1.0	18.8	45.2	4.8	40.4
Oregon	18.4	2.0	16.4	27.8	6.4	21.4	16.8	1.3	15.5	24.3	4.7	19.6
Pennsylvania	18.9	2.9	16.0	35.8	8.0	27.8	16.4	2.0	14.4	45.8	14.9	30.9
Rhode Island	19.6	2.3	17.3	—	—	—	19.8	2.2	17.6	8.8	7.0	1.8
South Carolina	12.4	1.2	11.2	—	—	—	12.3	1.2	11.1	48.3	13.8	34.5
South Dakota	14.8	0.9	13.9	—	—	—	14.8	0.9	13.9	—	—	—
Tennessee	17.0	1.5	15.5	25.5	4.2	21.3	14.0	0.9	13.1	80.2	9.0	71.2
Texas	19.0	1.5	17.5	27.0	4.3	22.7	16.9	0.9	16.0	54.6	10.1	44.5
Utah	23.2	0.9	22.3	—	—	—	23.2	0.9	22.3	—	—	—
Vermont	26.1	1.8	24.3	—	—	—	23.8	1.5	22.3	30.4	2.4	28.0
Virginia	19.1	1.8	17.3	29.0	5.7	23.3	16.8	0.9	15.9	63.5	15.4	48.1
Washington	24.0	2.5	21.5	28.9	5.5	23.4	23.1	1.9	21.2	56.7	31.3	25.4
West Virginia	12.9	0.7	12.2	—	—	—	12.5	0.6	11.9	60.0	11.4	48.6
Wisconsin	24.3	2.7	21.6	26.3	3.9	22.4	22.0	2.1	19.9	74.0	13.6	60.4
Wyoming	25.4	4.1	21.3	33.2	6.9	26.3	16.5	0.9	15.6	—	—	—

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[1] Includes total professional nursing personnel, total practical nursing personnel, and total auxiliary nursing personnel.
[2] See table 51, footnote 1.
[3] Includes supervisory and nonbedside personnel in addition to the professional and nonprofessional staff explained in table 52a, footnotes 2 and 3.

SOURCE: American Hospital Association, Chicago, Ill. Unpublished data.

Table 55.—Nurse-patient ratios in tuberculosis hospitals, by type of control, region, and State: 1951 (bedside nursing personnel)

Region and State	Nursing personnel per 100 patients[1] in hospitals by type of control											
	All types			Federal[2]			Other government			Nongovernment		
	Total	Professional[3]	Nonprofessional[4]	Total	Professional[3]	Nonprofessional[4]	Total	Professional[3]	Nonprofessional[4]	Total	Professional[3]	Nonprofessional[4]
United States	24	5	19	34	11	23	23	4	19	20	4	16
Northeast	25	6	19	31	10	21	26	6	20	18	4	14
North Central	23	4	19	40	12	28	23	4	19	20	4	16
South	23	3	20	36	9	27	21	2	19	18	2	16
West	26	7	19	33	13	20	25	6	19	24	6	18
Alabama	14	2	12	—	—	—	13	1	12	15	3	12
Arizona	33	13	20	33	14	19	31	12	19	38	11	27
Arkansas	11	—	11	—	—	—	11	—	11	—	—	—
California	24	6	18	37	14	23	22	4	18	22	7	15
Colorado	22	4	18	—	—	—	—	—	—	22	4	18
Connecticut	23	5	18	—	—	—	24	5	19	15	4	11
Delaware	7	1	6	—	—	—	7	1	6	—	—	—
District of Columbia	33	8	25	—	—	—	33	8	25	—	—	—
Florida	28	1	27	—	—	—	28	1	27	—	—	—
Georgia	25	—	25	—	—	—	25	—	25	—	—	—
Idaho	44	3	41	—	—	—	44	3	41	—	—	—
Illinois	17	4	13	—	—	—	18	5	13	18	3	15
Indiana	20	1	19	—	—	—	20	1	19	—	—	—
Iowa	17	—	17	—	—	—	17	—	17	—	—	—
Kansas	21	2	19	—	—	—	21	2	19	—	—	—
Kentucky	27	3	24	36	5	31	25	2	23	—	—	—
Louisiana	24	—	24	—	—	—	24	—	24	27	—	27
Maine	17	3	14	—	—	—	16	3	13	16	—	16
Maryland	23	1	22	—	—	—	23	1	22	26	2	24
Massachusetts	31	8	23	31	11	20	31	8	23	21	4	17
Michigan	28	7	21	—	—	—	29	8	21	24	3	21
Minnesota	23	4	19	—	—	—	23	4	19	—	—	—
Mississippi	26	3	23	—	—	—	26	3	23	—	—	—
Missouri	25	5	20	41	11	30	20	3	17	—	—	—
Montana	12	1	11	—	—	—	12	1	11	—	—	—
Nebraska	31	—	31	—	—	—	31	—	31	—	—	—
Nevada	—	—	—	—	—	—	—	—	—	—	—	—
New Hampshire	19	7	12	—	—	—	18	5	13	24	12	12
New Jersey	22	6	16	—	—	—	23	6	17	7	—	7
New Mexico	26	8	18	27	11	16	24	5	19	30	10	20
New York	27	6	21	32	10	22	29	6	23	19	4	15
North Carolina	27	5	22	38	9	29	20	3	17	40	5	35
North Dakota	11	—	11	—	—	—	11	—	11	—	—	—
Ohio	26	3	23	33	14	19	27	2	25	15	4	11
Oklahoma	22	3	19	—	—	—	22	3	19	24	—	24
Oregon	21	2	19	—	—	—	20	3	17	31	1	30
Pennsylvania	21	5	16	26	8	18	20	5	15	18	4	14
Rhode Island	22	1	21	—	—	—	23	1	22	13	3	10
South Carolina	15	5	10	—	—	—	16	5	11	9	7	2
South Dakota	23	7	16	—	—	—	23	7	16	—	—	—
Tennessee	29	6	23	33	12	21	31	5	26	9	2	7
Texas	19	2	17	32	11	21	17	1	16	21	2	19
Utah	9	1	8	—	—	—	9	1	8	—	—	—
Vermont	16	8	8	—	—	—	16	8	8	—	—	—
Virginia	20	2	18	—	—	—	20	2	18	38	—	38
Washington	31	9	22	32	10	22	31	9	22	28	7	21
West Virginia	18	—	18	—	—	—	18	—	18	13	—	13
Wisconsin	23	5	18	43	12	31	21	4	17	17	4	13
Wyoming	18	11	7	—	—	—	18	11	7	—	—	—

[1] See table 51, footnote 1.
[2] See table 51, footnote 2.
[3] See table 51, footnote 3.
[4] See table 51, footnote 4.

SOURCE: Tibbitts, Helen G., and Levine, Eugene. Health Manpower Source Book, Section 2—Nursing Personnel. Public Health Service Pub. No. 263. Washington, U.S. Government Printing Office, 1953, p. 78.

Table 56a.—Nurse-patient ratios in tuberculosis hospitals, by type of control, region, and State: 1959 (bedside nursing personnel)

Region and State	Nursing personnel per 100 patients [1] in hospitals by type of control											
	All types			Federal			Other government			Nongovernment		
	Total	Professional [2]	Nonprofessional[3]	Total	Professional [2]	Nonprofessional[3]	Total	Professional [2]	Nonprofessional[3]	Total	Professional [2]	Nonprofessional[3]
United States	30	5	25	33	10	23	29	4	25	28	3	25
Northeast	33	7	26	30	9	21	34	7	27	28	3	25
North Central	31	4	27	33	10	23	31	4	27	22	2	20
South	26	3	23	37	11	26	25	2	23	26	(4)	26
West	32	6	26	33	11	22	31	5	26	31	6	25
Alabama	19	(4)	19	—	—	—	19	—	19	18	(4)	18
Alaska	—	—	—	—	—	—	—	—	—	—	—	—
Arizona	32	9	23	37	12	25	17	—	17	26	—	26
Arkansas	18	—	18	—	—	—	18	—	18	—	—	—
California	29	6	23	32	10	22	29	5	24	26	4	22
Colorado	29	5	24	—	—	—	—	—	—	29	5	24
Connecticut	45	11	34	—	—	—	45	11	34	—	—	—
Delaware	25	7	18	—	—	—	25	7	18	—	—	—
District of Columbia	—	—	—	—	—	—	—	—	—	—	—	—
Florida	33	2	31	—	—	—	33	2	31	—	—	—
Georgia	—	—	—	—	—	—	—	—	—	—	—	—
Hawaii	33	7	26	—	—	—	—	—	—	37	9	28
Idaho	38	2	36	—	—	—	38	2	36	—	—	—
Illinois	26	6	20	—	—	—	28	7	21	20	3	17
Indiana	30	1	29	—	—	—	30	1	29	—	—	—
Iowa	23	—	23	—	—	—	23	—	23	—	—	—
Kansas	33	—	33	—	—	—	33	—	33	—	—	—
Kentucky	24	2	22	32	10	22	23	1	22	—	—	—
Louisiana	24	(4)	24	—	—	—	24	(4)	24	—	—	—
Maine	49	8	41	—	—	—	49	8	41	—	—	—
Maryland	31	5	26	34	13	21	29	4	25	56	2	54
Massachusetts	40	8	32	31	8	23	44	7	37	37	3	34
Michigan	35	6	29	—	—	—	35	6	29	—	—	—
Minnesota	32	5	27	—	—	—	32	5	27	—	—	—
Mississippi	32	1	31	—	—	—	32	1	31	—	—	—
Missouri	30	2	28	30	9	21	30	1	29	—	—	—
Montana	25	—	25	—	—	—	25	—	25	—	—	—
Nebraska	28	2	26	—	—	—	28	2	26	—	—	—
Nevada	—	—	—	—	—	—	—	—	—	—	—	—
New Hampshire	33	17	16	—	—	—	33	17	16	—	—	—
New Jersey	44	11	33	—	—	—	44	11	33	37	9	28
New Mexico	40	4	36	32	11	21	43	—	43	67	—	67
New York	33	7	26	31	9	22	34	7	27	27	2	25
North Carolina	28	7	21	41	12	29	20	3	17	—	—	—
North Dakota	—	—	—	—	—	—	—	—	—	—	—	—
Ohio	32	4	28	25	8	17	35	2	33	—	—	—
Oklahoma	32	2	30	74	19	55	27	—	27	—	—	—
Oregon	90	7	83	—	—	—	90	7	83	—	—	—
Pennsylvania	22	5	17	27	10	17	21	4	17	27	2	25
Rhode Island	46	1	45	—	—	—	46	1	45	—	—	—
South Carolina	18	5	13	—	—	—	18	6	12	5	—	5
South Dakota	15	—	15	15	—	15	—	—	—	—	—	—
Tennessee	39	3	36	—	—	—	40	3	37	29	—	29
Texas	21	2	19	27	7	20	21	2	19	22	—	22
Utah	20	3	17	—	—	—	20	3	17	—	—	—
Vermont	16	10	6	—	—	—	16	10	6	—	—	—
Virginia	32	5	27	—	—	—	32	5	27	—	—	—
Washington	39	9	30	—	—	—	39	9	30	—	—	—
West Virginia	21	(4)	21	—	—	—	21	(4)	21	—	—	—
Wisconsin	29	6	23	40	13	27	24	3	21	27	—	27
Wyoming	24	—	24	—	—	—	24	—	24	—	—	—

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[1] See Table 51, footnote 1.
[2] See Table 52a, footnote 2.
[3] See Table 52a, footnote 3.
[4] Less than 0.5.

SOURCE: American Hospital Association, Chicago, Ill. Unpublished data.

Table 56b.—Nurse-patient ratios in tuberculosis hospitals, by type of control, region, and State: 1959 (total nursing personnel [1])

Region and State	Total nursing personnel per 100 patients [2] by type of control											
	All types			Federal			Other government			Nongovernment		
	Total	Professional [3]	Nonprofessional[3]	Total	Professional [3]	Nonprofessional[3]	Total	Professional [3]	Nonprofessional[3]	Total	Professional [3]	Nonprofessional[3]
United States	36	11	25	39	16	23	36	10	26	37	12	25
Northeast	40	13	27	35	14	21	41	13	28	38	12	26
North Central	37	11	26	40	17	23	37	10	27	31	11	20
South	32	8	24	43	17	26	30	7	23	29	5	24
West	39	14	25	38	15	23	39	13	26	41	16	25
Alabama	23	4	19	—	—	—	22	3	19	24	6	18
Alaska	—	—	—	—	—	—	—	—	—	—	—	—
Arizona	39	15	24	41	16	25	27	9	18	34	8	26
Arkansas	27	9	18	—	—	—	33	16	17	—	—	—
California	36	13	23	36	14	22	36	12	24	40	18	22
Colorado	38	14	24	—	—	—	—	—	—	38	14	24
Connecticut	55	21	34	—	—	—	55	21	34	—	—	—
Delaware	31	13	18	—	—	—	31	13	18	—	—	—
District of Columbia	—	—	—	—	—	—	—	—	—	—	—	—
Florida	42	12	30	—	—	—	42	12	30	—	—	—
Georgia	—	—	—	—	—	—	—	—	—	—	—	—
Hawaii	43	17	26	—	—	—	30	12	18	47	19	28
Idaho	58	21	37	—	—	—	58	21	37	—	—	—
Illinois	37	17	20	—	—	—	39	18	21	30	13	17
Indiana	36	7	29	—	—	—	36	7	29	—	—	—
Iowa	25	3	22	—	—	—	25	3	22	—	—	—
Kansas	34	1	33	—	—	—	34	1	33	—	—	—
Kentucky	28	7	21	38	17	21	27	6	21	—	—	—
Louisiana	31	7	24	—	—	—	31	7	24	...	...	...
Maine	59	18	41	—	—	—	59	18	41	—	—	—
Maryland	36	10	26	41	20	21	33	8	25	62	7	55
Massachusetts	50	18	32	36	13	23	58	20	38	58	24	34
Michigan	40	11	29	—	—	—	40	11	29	—	—	—
Minnesota	40	13	27	—	—	—	40	13	27	—	—	—
Mississippi	36	5	31	—	—	—	36	5	31	—	—	—
Missouri	35	8	27	37	16	21	35	7	28	—	—	—
Montana	37	12	25	—	—	—	37	12	25	—	—	—
Nebraska	28	2	26	—	—	—	28	2	26	—	—	—
Nevada	—	—	—	—	—	—	—	—	—	—	—	—
New Hampshire	37	15	22	—	—	—	37	15	22	—	—	—
New Jersey	51	18	33	—	—	—	50	17	33	56	27	29
New Mexico	46	10	36	40	19	21	38	5	43	78	11	67
New York	39	13	26	36	14	22	41	13	28	36	11	25
North Carolina	33	11	22	46	17	29	24	7	17	—	—	—
North Dakota	—	—	—	—	—	—	—	—	—	—	—	—
Ohio	38	10	28	30	13	17	41	8	33	—	—	—
Oklahoma	35	5	30	86	30	56	30	3	27	—	—	—
Oregon	118	34	84	—	—	—	118	34	84	—	—	—
Pennsylvania	26	9	17	32	14	18	24	7	17	34	9	25
Rhode Island	52	7	45	—	—	—	52	7	45	—	—	—
South Carolina	22	9	13	—	—	—	22	9	13	18	13	5
South Dakota	42	27	15	42	27	15	—	—	—	—	—	—
Tennessee	45	10	35	—	—	—	48	11	37	31	2	29
Texas	26	7	19	33	13	20	26	7	19	44	—	44
Utah	26	10	16	—	—	—	26	10	16	—	—	—
Vermont	18	12	6	—	—	—	18	12	6	—	—	—
Virginia	38	11	27	—	—	—	38	11	27	—	—	—
Washington	45	15	30	—	—	—	45	15	30	—	—	—
West Virginia	24	3	21	—	—	—	24	3	21	—	—	—
Wisconsin	37	13	24	46	19	27	32	11	21	34	7	27
Wyoming	36	12	24	—	—	—	36	12	24	—	—	—

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[1] Includes total professional nursing personnel, total practical nursing personnel, and total auxiliary nursing personnel.
[2] See Table 51, footnote 1.
[3] Includes supervisory and nonbedside personnel in addition to the professional and nonprofessional staff explained in table 52a, footnotes 2 and 3.

SOURCE: American Hospital Association, Chicago, Ill. Unpublished data.

Table 57.—Supervisory-staff level nursing personnel ratios in hospitals, by type and control of hospital, by region, and State: 1959

Region and State	Supervisory nursing personnel [1] per 100 staff level bedside nursing personnel [2] by type and control of hospital									
	Total	General and allied special			Psychiatric			Tuberculosis		
		Federal [3]	Other government	Non-government	Federal [3]	Other government	Non-government	Federal [3]	Other government	Non-government
United States	13	12	14	16	7	6	18	13	17	24
Northeast	14	13	12	17	9	9	20	14	16	28
North Central	13	11	14	15	7	5	15	15	18	38
South	13	13	14	15	6	4	18	12	16	11
West	13	12	15	16	8	5	20	11	21	25
Alabama	9	9	12	12	3	(4)	5	—	6	9
Alaska	18	10	15	40	—	—	—	—	—	—
Arizona	11	11	9	12	—	1	47	10	62	29
Arkansas	15	13	14	19	6	2	—	—	47	—
California	13	14	16	15	8	5	17	11	24	38
Colorado	12	10	14	14	7	4	30	—	—	25
Connecticut	15	13	20	19	—	7	21	—	20	—
Delaware	13	13	14	16	—	3	—	—	26	—
District of Columbia	13	10	9	12	—	—	17	—	—	—
Florida	15	16	13	18	—	—	12	—	15	—
Georgia	11	14	11	14	11	4	9	—	—	—
Hawaii	14	9	13	17	—	15	—	—	62	18
Idaho	21	14	21	27	—	3	—	—	45	—
Illinois	12	9	15	14	5	5	9	—	29	46
Indiana	12	10	16	13	7	6	16	—	18	—
Iowa	15	12	14	18	4	4	33	—	10	—
Kansas	14	14	18	18	24	6	12	—	3	—
Kentucky	12	11	16	14	9	3	29	18	17	—
Louisiana	12	9	13	13	—	1	41	—	27	—
Maine	20	22	31	25	17	7	33	—	18	—
Maryland	13	17	13	16	5	3	25	13	13	8
Massachusetts	17	14	16	21	12	13	20	13	25	51
Michigan	11	12	12	14	9	4	14	—	14	—
Minnesota	14	11	17	15	5	7	46	—	22	—
Mississippi	15	20	20	18	6	2	9	—	12	—
Missouri	11	8	13	13	6	2	15	21	15	—
Montana	18	13	11	21	—	8	—	—	9	—
Nebraska	15	12	28	16	—	8	—	—	3	—
Nevada	10	15	11	7	—	—	—	—	—	—
New Hampshire	21	17	16	26	—	15	—	—	10	—
New Jersey	12	8	11	16	7	6	20	—	9	45
New Mexico	13	13	21	14	—	1	41	23	2	17
New York	13	14	10	17	6	8	10	15	17	26
North Carolina	16	10	17	18	6	11	13	9	17	—
North Dakota	15	13	17	17	—	2	—	—	—	—
Ohio	11	12	15	13	4	5	6	16	15	—
Oklahoma	14	14	16	16	—	4	4	16	8	—
Oregon	15	9	17	19	7	5	3	—	24	—
Pennsylvania	14	14	15	15	8	9	29	13	13	19
Rhode Island	13	11	11	16	—	9	25	—	10	—
South Carolina	15	20	15	15	—	10	—	—	16	40
South Dakota	16	13	18	21	—	2	—	56	—	—
Tennessee	12	13	11	15	1	2	8	—	16	6
Texas	13	10	16	15	7	5	18	20	11	—
Utah	11	9	11	13	—	1	—	—	33	—
Vermont	17	—	—	21	—	6	8	—	10	—
Virginia	14	14	17	18	7	4	18	—	13	—
Washington	14	11	15	18	7	5	36	—	12	—
West Virginia	14	11	14	16	—	3	24	—	9	—
Wisconsin	15	12	12	17	5	6	13	11	33	25
Wyoming	10	16	12	8	13	1	—	—	17	—

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[1] Includes administrative nursing personnel and patient care unit supervisors, assistant supervisors, head nurses, and assistant head nurses.

[2] Includes full time equivalent staff nurses, practical nurses, attendants, nursing aides, oderlies and other auxiliary nursing personnel, i.e., those working time, plus one-half of those working part time.

[3] Does not include hospitals operated by the Bureau of Indian Affairs which are included with "other government" hospitals.

[4] Less than 0.5.

SOURCE: American Hospital Association, Chicago, Ill. Unpublished data.

PART VII

PROFESSIONAL NURSES IN PUBLIC HEALTH AND OCCUPATIONAL HEALTH

Since 1937, the directors of nursing in State health departments have collected information on numbers and educational preparation of nurses in public health work. State and local official and nonofficial public health agencies, boards of education and, in some years, industries, have supplied this information. The U.S. Public Health Service has compiled the data and obtained similar material from national agencies and universities. The reports have been complete and consistent, providing State counts annually through 1953, then in 1955 and 1957. Biennial counts began in 1960. That year also saw the first nationwide count of nurses employed part time in public health.

The increase in numbers of full-time public health nurses since 1937 has little more than kept pace with population increases throughout the country. Today there are only 16.2 nurses per 100,000 population as compared with 13.4 per 100,000 27 years ago (table 59). From 1950 to 1964 the total number employed full time for public health increased by about 10,000. However, when we consider the nurses who work directly with people in their homes, that is, staff nurses in local official and nonofficial agencies, in visiting nurse associations, and in combination services, the increase was only 1,700 nurses and the staff nurse-population ratio actually decreased from 10.5 to 9.2 in the 14-year span.[1]

The comparative figures are as follows:

Year	Staff nurses	Resident population Jan. 1	Staff nurses per 100,000 population	Population per nurse
1950	15, 867	150, 720, 000	10. 5	9, 500
1964	17, 572	190, 092, 000	9. 2	10, 818

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[1] Hudson, Helen H. and Lester, Mary R. Nurses in Public Health. American Journal of Nursing, 65 : 4, April 1965, table 2.

For many years, the ratio of 1 public health nurse to 5,000 population has been quoted as an acceptable standard for a program that does not include bedside care. Where bedside care of the sick is included in the program there should be 1 public health nurse for 2,000 or 2,500 people.[2] [3] [4] Although such ratios are not a measure of the needs in local communities, they do serve as guidelines for some estimation of personnel required.

Agencies in which a nursing care of the sick at home program is offered on a continuing basis as one of their declared publicized objectives increased from 470 in 1961 to 509 in 1963.[5] The 1963 survey found that areas served by these programs included about 55 percent of the total population in the country.[6] It is evident that the present home nursing care programs must expand considerably, and many new ones must be organized if the services are to be made available to the remaining 45 percent of the population, and especially to all those over 65 years of age who will be eligible for benefits under the Social Security Amendments of 1965.[7]

In 1964, 2,214 nurses were working part time in public health, over 700 more than in 1960. About 41 percent of the total were employed by boards of education. Registered nurses who supplement the work of the public health nurses in homes, clinics, and schools, numbered 402 full time and 297 part time in 1964. A total of 569 full-time and part-time licensed practical nurses also assisted the public health nurses.[8]

The proportion of nurses in public health who are academically qualified for their positions is increasing steadily (fig. 7). Table 61 and 62 show the improvement in the percent of staff and supervisory level nurses prepared in public health and in the percent holding baccalaureate degrees. Public health nurses working part time are showing similar improvement.

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[2] Emerson, Haven and Luginbuhl, Martha. Local Health Units for the Nation. New York, The Commonwealth Fund, 1945, pp. 14–15.

[3] National League for Nursing, Department of Public Health Nursing. Self-Survey Guides for Public Health Nursing Service. Part II—Public Health Nursing Program. New York, The League, January 1953.

[4] U.S. Department of Health, Education, and Welfare. Design for Statewide Nursing Surveys. Public Health Service Publication No. 460. Washington, U.S. Government Printing Office, 1956, p. 48.

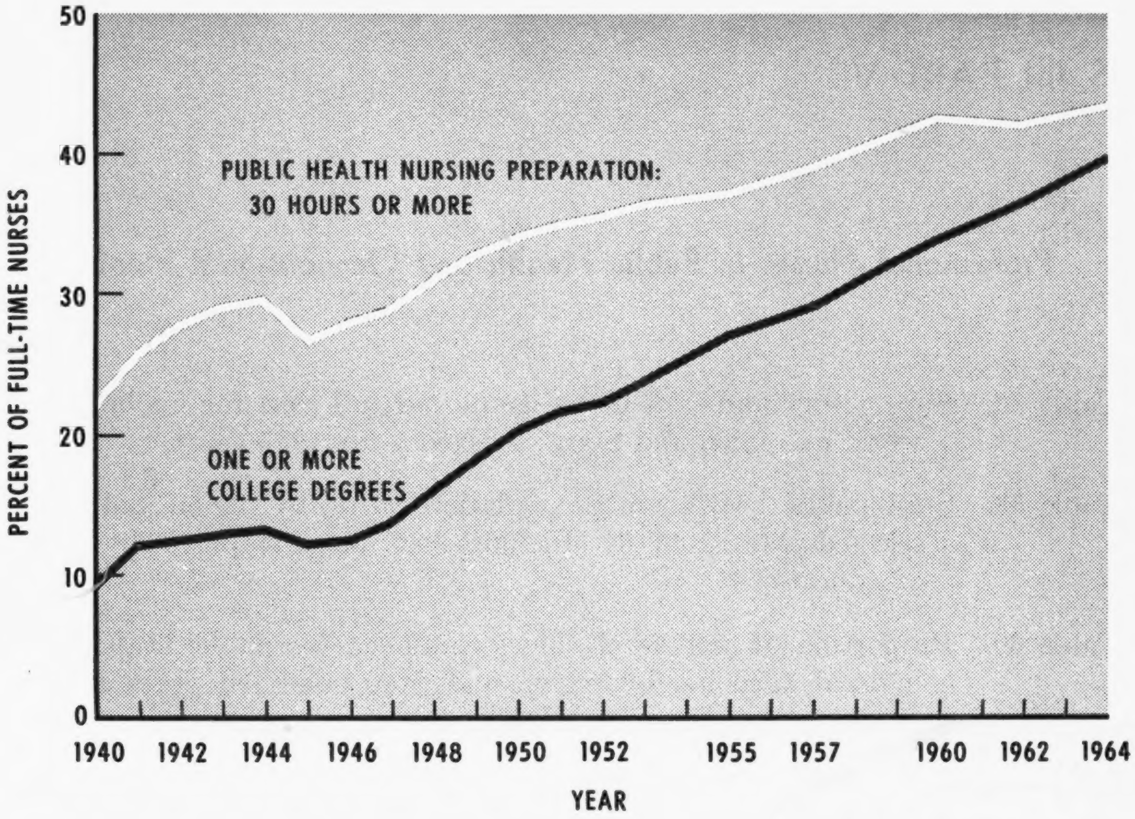
[5] Ferguson, Marion, and Phillips, Ruth. Availability of Services for Nursing Care of the Sick at Home. U.S. Department of Health, Education, and Welfare Public Health Service Publication No. 263. Washington, U.S. Government Printing Office, 1964, p. 7.

[6] Ibid., p. 15.

[7] Public Law 89-97, 89th Cong., H.R. 6675, July 30, 1965.

[8] U.S. Department of Health, Education, and Welfare. Nurses in Public Health. Public Health Service Publication No. 785. Washington, U.S. Government Printing Office, 1964, p. 5.

Figure 7. Educational preparation of nurses employed for public health work in State and local agencies has improved since 1940, but the majority of nurses still fall short of the recommended preparation.



Sources: Bryant, Zella and Hudson, Helen H.: The Census of Nurses in Public Health. The American Journal of Nursing, 62 : 12, December 1962, p. 107.

U.S. Department of Health, Education, and Welfare. Nurses in Public Health. Public Health Service Publication No. 785. Washington, U.S. Government Printing Office, 1964.

Occupational Health

As mentioned in the first paragraph of this part, industries have been asked to furnish data to the State directors of public health nursing on nurses engaged in occupational health or industrial nursing duties. Such data were included as a separate section of the public health nursing counts if the reports were reasonably complete. In other years, information has been collected by the Division of Occupational Health of the U.S. Public Health Service. The annual data within the series of reports are not strictly comparable as some years do not include all States, others contain incomplete counts for many States, and still others include estimates where actual figures were not available. The reports on numbers of occupational health or industrial nurses found in the four inventories are shown in tables 13a to 13d. Brown [9] has recently completed a detailed questionnaire study of nurses who reported themselves active in this field during the 1962 inventory period.

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[9] Brown, Mary I. Data on Occupational Health Nurses. American Journal of Nursing 65 : 5, May 1965, p. 120.

TABLES IN PART VII

Professional Nurses in Public Health and Occupational Health

Table 58. Supervisory and staff nurses employed full time for public health work, by region and State: selected years 1937–64

Table 59. Staff public health nurse-population ratios, by region and State: selected years: 1937–64 (Includes staff nurses employed by boards of education)

Table 60. Proportion of staff level nurses employed for public health work in local agencies, by region and State: selected years 1937–64

Table 61. Educational preparation of staff level public health nurses, by region and State: selected years 1942–64

Table 62. Educational preparation of public health nursing administrators, consultants, and supervisors, by region and State: selected years 1942–64

Table 58.—Supervisory and staff nurses employed full time for public health work,[1] by region and State: selected years 1937–1964

Region and State	Supervisory				Staff nurses			
	1937	1947	1957	1964	1937	1947	1957	1964
United States	322	2, 330	3, 092	4, 001	17, 212	18, 537	24, 498	30, 253
Northeast	103	868	1, 091	1, 331	7, 656	7, 777	9, 240	11, 189
North Central	67	607	828	1, 008	4, 894	4, 631	5, 473	6, 559
South	101	471	651	892	2, 714	3, 668	5, 526	6, 986
West	51	384	522	770	1, 948	2, 461	4, 259	5, 519
Alabama	5	15	23	26	143	194	215	246
Alaska	1	4	9	8	30	39	46	58
Arizona	2	12	13	22	97	138	226	385
Arkansas	2	11	13	20	76	97	110	151
California	5	163	293	457	1, 026	1, 466	2, 679	3, 415
Colorado	3	21	40	49	143	144	262	325
Connecticut	4	58	79	96	568	509	611	733
Delaware	2	9	12	10	66	77	112	182
District of Columbia	7	26	27	28	137	154	200	197
Florida	13	35	48	143	122	305	490	608
Georgia	20	60	73	87	189	302	452	615
Hawaii	13	13	22	21	76	79	76	80
Idaho	3	11	7	15	40	42	69	86
Illinois	10	144	189	222	920	995	1, 199	1, 383
Indiana	4	33	62	76	367	368	459	641
Iowa	3	29	32	38	213	196	259	347
Kansas	3	13	23	32	129	174	228	272
Kentucky	7	20	41	46	266	237	256	333
Louisiana	3	31	45	51	128	193	226	256
Maine	5	10	9	19	119	128	138	148
Maryland	1	50	60	101	287	322	475	594
Massachusetts	18	135	146	183	1, 171	1, 244	1, 201	1, 296
Michigan	22	116	145	180	938	689	732	820
Minnesota	6	31	55	67	401	379	417	476
Mississippi	7	22	24	25	105	134	208	246
Missouri	2	41	50	59	341	334	444	580
Montana	2	12	9	15	62	51	62	76
Nebraska	1	6	14	11	68	94	97	122
Nevada	1	2	4	6	17	18	36	69
New Hampshire	2	10	14	21	153	144	170	155
New Jersey	18	135	153	174	930	1, 116	1, 434	1, 920
New Mexico	5	11	18	23	69	75	136	179
New York	50	333	407	523	3, 083	2, 732	3, 331	4, 030
North Carolina	4	25	45	54	186	347	464	544
North Dakota	2	7	9	11	26	41	53	55
Ohio	9	131	162	209	1, 042	923	1, 086	1, 298
Oklahoma	3	17	24	29	79	126	203	237
Oregon	3	23	26	43	97	113	157	205
Pennsylvania	1	135	234	259	1, 377	1, 661	2, 068	2, 595
Rhode Island	2	44	36	41	204	174	206	232
South Carolina	6	17	49	32	132	231	235	278
South Dakota	2	4	6	7	53	33	37	53
Tennessee	5	34	29	43	229	239	265	367
Texas	7	52	69	100	205	324	996	1, 366
Utah	8	11	21	30	81	75	123	139
Vermont	3	8	13	15	51	69	81	80
Virginia	7	36	48	75	236	293	473	587
Washington	3	99	55	74	192	199	351	451
West Virginia	2	11	21	22	128	93	146	179
Wisconsin	3	52	81	96	396	405	462	512
Wyoming	2	2	5	7	18	22	36	51
Guam	—	—	—	8	—	—	—	—
Puerto Rico	—	23	45	71	—	266	375	293
Virgin Islands	—	2	3	5	—	13	14	25

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[1] Administrators, consultants, and supervisors are counted as supervisory. Table excludes public health nurses employed by national agencies, universities, colleges, and schools of nursing.

SOURCES: Tibbitts, Helen G., and Levine, Eugene. Health Manpower Source Book, Section 2—Nursing Personnel. Public Health Service Pub. No. 263. Washington, U.S. Government Printing Office, 1953, p. 59.

U.S. Department of Health, Education, and Welfare, Public Health Service. Census of Nurses Employed for Public Health Work on Jan. 1, 1957. Processed.

U.S. Department of Health, Education, and Welfare, Public Health Service, Division of Nursing. Nurses in Public Health. Public Health Service Pub. No. 785. Washington, U.S. Government Printing Office, 1964, p. 11.

Table 59.—Staff public health nurse-population ratios,[1] by region and State: selected years 1937–1964 (includes staff nurses employed by boards of education)

Region and State	Staff nurses per 100,000 population				Population per staff nurse			
	1937	1947	1957	1964	1937	1947	1957	1964
United States	13. 4	13. 2	14. 9	16. 2	7, 500	7, 600	6, 700	6, 200
Northeast	21. 4	21. 3	21. 7	24. 0	4, 700	4, 700	4, 600	4, 200
North Central	12. 4	11. 1	11. 1	12. 4	8, 100	9, 000	9, 000	8, 100
South	6. 8	8. 3	10. 8	12. 0	14, 700	12, 100	9, 300	8, 300
West	14. 5	13. 5	17. 0	17. 9	6, 900	7, 400	5, 900	5, 600
Alabama	5. 2	6. 7	7. 0	7. 3	19, 200	15, 000	14, 200	13, 700
Alaska	44. 1	39. 4	20. 5	23. 7	2, 300	2, 500	4, 900	4, 200
Arizona	21. 9	22. 4	21. 5	25. 4	4, 600	4, 500	4, 700	3, 900
Arkansas	4. 0	5. 4	6. 5	7. 9	24, 900	18, 500	15, 500	12, 600
California	16. 2	15. 3	19. 5	19. 5	6, 200	6, 500	5, 100	5, 100
Colorado	13. 1	12. 0	16. 1	16. 9	7, 600	8, 400	6, 200	5, 900
Connecticut	34. 0	26. 7	26. 4	27. 0	2, 900	3, 700	3, 800	3, 700
Delaware	26. 1	25. 8	27. 5	37. 9	3, 800	3, 900	3, 600	2, 600
District of Columbia	21. 8	17. 1	26. 4	24. 7	4, 600	5, 800	3, 800	4, 100
Florida	7. 4	12. 5	12. 1	11. 0	13, 500	8, 000	8, 300	9, 100
Georgia	6. 3	9. 3	12. 2	14. 6	15, 800	10, 700	8, 200	6, 900
Hawaii	19. 2	14. 5	13. 6	11. 7	5, 200	6, 900	7, 400	8, 600
Idaho	8. 1	8. 3	11. 0	12. 5	12, 400	12, 100	9, 100	8, 000
Illinois	11. 7	12. 2	12. 6	13. 3	8, 500	8, 200	7, 900	7, 500
Indiana	11. 0	9. 9	10. 3	13. 4	9, 100	10, 100	9, 700	7, 500
Iowa	8. 5	7. 9	9. 6	12. 6	11, 800	12, 600	10, 400	7, 900
Kansas	6. 9	9. 6	10. 8	12. 3	14, 500	10, 400	9, 300	8, 200
Kentucky	9. 6	8. 6	8. 8	10. 7	10, 400	11, 600	11, 300	9, 400
Louisiana	5. 7	7. 6	7. 5	7. 5	17, 500	13, 200	13, 400	13, 300
Maine	14. 2	15. 4	14. 7	15. 0	7, 100	6, 500	6, 800	6, 700
Maryland	16. 4	14. 5	16. 9	17. 7	6, 100	6, 900	5, 900	5, 600
Massachussetts	26. 9	27. 7	24. 6	24. 5	3, 700	3, 600	4, 100	4, 100
Michigan	19. 2	11. 7	9. 8	10. 2	5, 200	8, 500	10, 200	9, 800
Minnesota	14. 7	13. 9	12. 9	13. 6	6, 800	7, 200	7, 800	7, 300
Mississippi	5. 1	6. 5	10. 0	10. 8	19, 700	15, 400	10, 000	9, 300
Missouri	9. 0	8. 9	10. 7	13. 2	11, 100	11, 200	9, 400	7, 600
Montana	11. 2	9. 9	9. 5	10. 8	8, 900	10, 100	10, 600	9, 200
Nebraska	5. 0	7. 5	6. 9	8. 3	20, 000	13, 400	14, 400	12, 000
Nevada	16. 8	12. 6	14. 4	17. 7	5, 900	7, 900	6, 900	5, 600
New Hampshire	31. 8	29. 1	30. 0	24. 1	3, 100	3, 400	3, 300	4, 200
New Jersey	22. 8	24. 8	25. 5	29. 3	4, 400	4, 000	3, 900	3, 400
New Mexico	14. 1	13. 4	16. 9	18. 2	7, 100	7, 500	5, 900	5, 500
New York	22. 9	20. 4	20. 7	22. 8	4, 400	4, 900	4, 800	4, 400
North Carolina	5. 6	9. 4	10. 8	11. 4	18, 000	10, 700	9, 300	8, 800
North Dakota	3. 9	7. 2	8. 6	8. 5	25, 400	13, 900	11, 600	11, 700
Ohio	15. 3	12. 3	11. 8	13. 0	6, 500	8, 100	8, 500	7, 700
Oklahoma	3. 3	5. 9	8. 9	9. 7	29, 900	16, 900	11, 200	10, 300
Oregon	9. 5	8. 4	9. 2	11. 1	10, 600	11, 800	10, 800	9, 000
Pennsylvania	14. 1	16. 8	18. 8	22. 7	7, 100	5, 900	5, 300	4, 400
Rhode Island	29. 7	22. 6	24. 5	26. 0	3, 400	4, 400	4, 100	3, 800
South Carolina	7. 4	11. 9	10. 5	11. 1	13, 500	8, 400	9, 500	9, 000
South Dakota	8. 0	5. 6	5. 5	7. 5	12, 600	17, 800	18, 100	13, 400
Tennessee	8. 2	7. 8	7. 8	9. 8	12, 200	12, 900	12, 900	10, 200
Texas	3. 3	4. 5	11. 3	13. 4	30, 200	22, 200	8, 900	7, 500
Utah	15. 4	11. 8	15. 2	14. 3	6, 500	8, 500	6, 600	7, 000
Vermont	14. 3	20. 2	21. 5	19. 8	7, 000	5, 000	4, 700	5, 100
Virginia	9. 2	9. 1	12. 7	13. 7	10, 800	11, 000	7, 900	7, 300
Washington	11. 6	8. 7	13. 2	15. 2	8, 600	11, 500	7, 600	6, 600
West Virginia	7. 1	5. 1	7. 9	9. 9	14, 100	19, 600	12, 700	10, 100
Wisconsin	12. 8	12. 8	12. 3	12. 6	7, 800	7, 800	8, 100	7, 900
Wyoming	7. 5	8. 7	11. 5	15. 0	13, 300	11, 500	8, 700	6, 600
Puerto Rico	—	12. 4	16. 7	11. 6	—	8, 000	6, 000	8, 600
Virgin Islands	—	48. 1	50. 0	62. 5	—	2, 100	2, 000	1, 600

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[1] Populations used were total population excluding Armed Forces overseas as of July 1 of the year previous to the year stated in the table. Nurses were counted as of Jan. 1 of the year.

SOURCES: U.S. Department of Commerce, Bureau of the Census. Current Population Estimate. Washington, U.S. Government Printing Office. Series P-25, No. 139.

Ibid., No. 294.

U.S. Department of Commerce, Bureau of the Census. Statistical Abstract of the United States. Washington, U.S. Government Printing Office, 1964,

Table 60.—Proportion of staff level nurses employed for public health work in local agencies,[1] by region, and State: selected years 1937–1964

Region and State	Percent employed by:											
	Local official health agencies [2]				Local nonofficial agencies [3]				Boards of education			
	1937	1947	1957	1964	1937	1947	1957	1964	1937	1947	1957	1964
United States	45	50	47	46	32	23	14	11	21	24	37	42
Northeast	32	33	32	30	45	33	22	17	20	31	45	53
North Central	48	55	51	48	30	22	15	13	21	22	33	39
South	66	77	71	73	22	13	5	5	9	9	21	21
West	45	55	45	43	14	10	6	5	39	32	47	51
Alabama	92	86	87	87	4	7	5	6	—	1	4	3
Alaska	40	89	20	72	—	—	—	—	—	2	11	28
Arizona	49	50	26	22	4	7	8	7	42	43	66	69
Arkansas	78	76	85	90	13	9	5	3	9	12	8	7
California	42	45	38	36	12	12	7	6	45	40	55	58
Colorado	31	45	62	58	37	22	(4)	—	32	31	38	42
Connecticut	14	23	26	26	54	54	47	39	30	21	25	34
Delaware	35	39	28	17	36	25	13	8	29	36	59	74
District of Columbia	44	60	—	55	56	40	21	23	—	—	23	22
Florida	53	79	91	92	14	14	6	8	33	6	1	—
Georgia	65	89	97	89	26	8	3	5	4	3	—	5
Hawaii	65	84	90	93	28	—	7	6	7	16	3	1
Idaho	80	67	65	62	3	7	—	—	15	26	35	36
Illinois	52	54	40	36	28	27	21	17	16	17	38	47
Indiana	38	36	42	36	37	34	16	16	25	30	42	48
Iowa	11	25	31	26	43	28	15	14	44	45	53	59
Kansas	22	55	40	39	40	10	5	3	38	33	53	56
Kentucky	66	80	84	88	30	19	14	8	3	—	1	2
Louisiana	59	82	86	86	24	9	6	6	10	8	8	8
Maine	34	36	14	57	56	48	42	24	10	16	17	19
Maryland	69	77	83	88	28	15	6	4	3	8	11	8
Massachusetts	39	33	38	35	44	43	36	31	16	24	26	33
Michigan	66	66	68	63	23	21	15	15	11	13	17	22
Minnesota	27	45	46	42	31	18	7	6	41	34	47	52
Mississippi	98	98	100	100	—	—	—	—	—	1	—	—
Missouri	29	32	39	33	32	22	13	11	39	40	44	51
Montana	63	80	73	62	11	4	10	3	26	10	16	22
Nebraska	12	22	30	40	31	27	—	—	43	46	69	66
Nevada	29	72	8	39	—	—	—	—	24	28	50	61
New Hampshire	37	33	38	23	30	29	24	36	33	28	31	40
New Jersey	26	37	35	24	48	22	18	14	23	41	47	61
New Mexico	77	63	44	38	4	9	4	5	19	27	51	57
New York	46	48	37	35	37	24	13	10	16	27	49	55
North Carolina	88	94	97	100	8	4	1	(4)	—	—	(4)	—
North Dakota	92	95	98	100	—	—	—	—	8	—	—	—
Ohio	52	65	56	58	31	17	16	10	17	16	28	31
Oklahoma	72	72	67	65	18	9	2	(4)	5	17	30	33
Oregon	43	82	83	74	19	10	6	6	38	8	11	19
Pennsylvania	11	12	21	22	56	36	19	14	24	40	60	64
Rhode Island	12	17	12	21	61	58	48	42	19	21	28	35
South Carolina	76	66	72	77	15	13	3	2	8	15	25	13
South Dakota	83	61	54	55	—	—	—	—	17	33	43	45
Tennessee	83	82	89	88	12	11	3	4	3	5	8	8
Texas	58	64	30	30	17	9	4	4	20	27	66	66
Utah	80	92	53	91	16	4	7	6	4	4	2	2
Vermont	24	30	35	43	60	33	2	29	16	26	21	23
Virginia	50	63	69	74	27	19	9	6	17	15	22	19
Washington	42	70	67	62	23	8	3	2	34	22	30	36
West Virginia	33	56	68	72	40	14	5	3	27	26	23	21
Wisconsin	63	73	78	77	25	21	16	15	7	5	6	8
Wyoming	28	50	33	4	5	—	—	—	67	45	67	67
Puerto Rico	—	99	—	100	—	1	—	—	—	—	—	—
Virgin Islands	—	62	—	92	—	—	—	—	—	38	—	8

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[1] The proportion employed by State agencies is not directly shown in this table. This figure is the difference between 100 percent and the sum of the percentages for the three types of local agencies shown. [2] Local official agencies include health departments and combination services.

[3] Local nonofficial agencies include Visiting Nurse Associations and other voluntary organizations. [4] Less than 0.5 percent.

SOURCES: Tibbitts, Helen G., and Levine, Eugene. Health Manpower Source Book, Section 2—Nursing Personnel. Public Health Service Pub. No. 263. Washington, U.S. Government Printing Office, 1953, p. 61.

U.S. Department of Health, Education, and Welfare, Public Health Service. Census of Nurses Employed for Public Health Work on Jan. 1, 1957. Processed. pp. 20 and 23.

U.S. Department of Health, Education, and Welfare, Public Health Service, Division of Nursing. Nurses in Public Health. Public Health Service Pub. No. 785. Washington, U.S. Government Printing Office, 1964, pp. 13 and 21.

Table 61.—Educational preparation of staff level public health nurses, by region and State: selected years 1942–1964

Region and State	Number for whom education was reported			Percent with approved public health nursing education			Percent with baccalaureate or higher degree		
	1942	1952	1964	1942	1952	1964	1942	1952	1964
United States	18, 586	21, 490	30, 012	24	30	38	10	18	35
Northeast	7, 525	8, 419	11, 095	17	29	40	7	15	36
North Central	4, 848	4, 946	6, 524	27	29	35	12	18	31
South	4, 032	4, 893	6, 958	19	22	24	8	10	19
West	2, 181	3, 232	5, 435	53	48	55	24	34	59
Alabama	226	197	246	12	10	31	3	2	11
Alaska	38	50	58	82	64	76	34	52	62
Arizona	108	166	307	40	31	36	3	18	26
Arkansas	128	100	151	30	32	21	11	12	9
California	1, 104	1, 884	3, 412	42	46	54	27	36	66
Colorado	146	204	325	31	34	51	10	36	60
Connecticut	471	557	733	20	22	31	11	20	29
Delaware	73	94	182	5	21	13	23	3	10
District of Columbia	165	171	196	36	74	56	13	50	57
Florida	197	362	608	23	29	30	8	12	23
Georgia	331	441	615	17	11	23	6	6	9
Hawaii	82	77	80	87	83	100	12	24	50
Idaho	62	68	86	50	24	22	24	18	22
Illinois	824	994	1, 383	15	25	39	6	12	31
Indiana	421	429	630	30	24	33	14	23	33
Iowa	211	239	347	37	28	30	10	16	25
Kansas	184	185	272	14	23	23	8	12	21
Kentucky	322	253	333	11	9	11	5	4	8
Louisiana	218	207	256	7	16	20	4	6	18
Maine	127	136	148	22	31	32	2	7	9
Maryland	339	429	594	9	9	30	3	7	24
Massachusetts	1, 010	1, 185	1, 296	18	14	22	4	6	18
Michigan	871	728	820	44	42	40	12	22	33
Minnesota	376	389	475	48	63	74	25	40	61
Mississippi	170	188	246	17	7	6	26	4	4
Missouri	423	346	564	21	19	17	8	15	19
Montana	63	56	76	62	46	45	19	23	36
Nebraska	124	105	122	15	20	30	18	16	51
Nevada	22	23	69	64	48	62	14	13	57
New Hampshire	139	149	155	12	17	16	1	5	6
New Jersey	1, 057	1, 327	1, 884	10	17	21	5	11	29
New Mexico	66	113	179	82	61	49	18	33	31
New York	2, 957	3, 124	4, 013	23	52	68	11	25	49
North Carolina	338	446	544	17	29	26	4	4	12
North Dakota	47	49	55	34	24	25	8	—	16
Ohio	907	1, 029	1, 291	19	16	24	13	16	24
Oklahoma	158	172	237	30	24	15	10	12	14
Oregon	128	139	205	91	81	63	44	55	60
Pennsylvania	1, 507	1, 677	2, 554	8	11	27	3	8	38
Rhode Island	182	190	232	13	12	20	3	6	18
South Carolina	211	242	278	10	16	22	4	7	10
South Dakota	67	30	53	19	40	30	6	13	30
Tennessee	277	316	367	25	30	30	11	17	16
Texas	439	714	1, 339	13	14	22	12	10	32
Utah	97	109	139	48	33	51	6	16	30
Vermont	75	74	80	25	34	50	4	8	19
Virginia	297	420	587	41	48	34	9	16	21
Washington	231	311	451	83	70	73	29	38	62
West Virginia	143	141	179	26	13	8	6	5	5
Wisconsin	393	423	512	19	33	51	8	21	31
Wyoming	34	32	48	56	9	40	35	19	38
Puerto Rico	195	356	293	1	15	13	—	—	2
Virgin Islands	—	15	25	—	—	12	—	—	20

SOURCES: Tibbitts, Helen G., and Levine, Eugene. Health Manpower Source Book, Section 2—Nursing Personnel. Public Health Service Pub. No. 263. Washington, U.S. Government Printing Office, 1963, p. 64.

U.S. Department of Health, Education, and Welfare, Public Health Service, Division of Nursing. Nurses in Public Health. Public Health Service Pub. No. 785. Washington, U.S. Government Printing Office, 1964, pp. 11 and 13.

Table 62.—Educational preparation of public health nursing administrators, consultants, and supervisors, by region and State: selected years 1942–1964

Region and State	Number for whom education was reported			Percent with approved public health nursing education			Percent with baccalaureate or higher degree		
	1942	1952	1964	1942	1952	1964	1942	1952	1964
United States	1, 966	2, 686	3, 999	65	81	83	34	62	76
Northeast	796	953	1, 331	60	80	83	31	62	81
North Central	560	740	1, 007	64	76	78	32	60	71
South	385	567	892	72	84	89	41	59	69
West	225	426	769	72	85	83	36	72	81
Alabama	21	17	26	90	94	100	57	82	77
Alaska	2	8	8	50	100	100	100	100	100
Arizona	6	10	21	100	80	90	17	70	100
Arkansas	8	9	20	88	100	100	25	78	60
California	101	235	457	50	71	77	27	61	80
Colorado	17	29	49	76	79	90	35	83	90
Connecticut	51	63	96	76	81	82	51	71	79
Delaware	6	10	10	100	90	100	33	50	70
District of Columbia	22	27	28	91	89	100	77	89	100
Florida	19	39	143	84	97	90	21	59	60
Georgia	32	67	87	81	86	95	44	69	66
Hawaii	16	17	21	44	100	100	88	53	86
Idaho	6	7	15	100	100	80	83	100	60
Illinois	88	153	222	43	65	73	25	41	63
Indiana	29	62	75	69	60	71	28	64	77
Iowa	33	29	38	67	72	63	36	69	63
Kansas	10	20	32	80	90	72	30	60	41
Kentucky	27	35	46	67	60	78	30	31	54
Louisiana	24	31	51	62	68	61	33	52	43
Maine	12	11	19	75	91	68	50	73	42
Maryland	39	61	101	54	88	90	41	66	88
Massachusetts	109	130	183	55	69	69	18	45	66
Michigan	103	127	180	95	95	87	45	75	85
Minnesota	33	51	67	82	82	93	48	78	85
Mississippi	26	18	25	42	89	80	46	56	52
Missouri	52	53	59	77	77	83	33	70	71
Montana	7	6	15	86	100	100	43	50	73
Nebraska	15	12	11	60	75	82	33	83	100
Nevada	2	2	6	100	100	100	50	100	83
New Hampshire	14	11	21	28	73	48	7	36	43
New Jersey	102	140	174	52	66	78	27	52	74
New Mexico	9	17	23	89	94	87	22	70	74
New York	329	415	523	60	90	93	35	77	92
North Carolina	27	35	54	81	97	100	44	57	81
North Dakota	5	4	11	100	100	100	40	75	64
Ohio	136	152	209	48	71	74	23	52	70
Oklahoma	10	22	29	90	91	93	30	68	72
Oregon	18	23	43	100	96	91	44	78	79
Pennsylvania	143	138	259	62	73	83	27	43	84
Rhode Island	29	33	41	59	94	83	45	61	78
South Carolina	15	24	32	73	92	97	20	54	72
South Dakota	4	5	7	50	80	100	—	80	71
Tennessee	39	46	43	74	85	95	31	43	74
Texas	35	63	100	63	75	79	43	51	71
Utah	14	18	30	100	94	87	36	61	73
Vermont	7	12	15	86	83	67	14	33	47
Virginia	22	47	75	77	87	92	59	64	73
Washington	24	52	74	96	92	88	62	75	85
West Virginia	13	16	22	77	56	73	46	44	64
Wisconsin	52	72	96	42	76	81	29	53	66
Wyoming	3	2	7	100	100	86	67	50	86
Guam	—	—	8	—	—	75	—	—	63
Puerto Rico	142	41	62	1	61	87	10	20	40
Virgin Islands	—	2	5	—	100	100	—	100	100

SOURCES: Tibbitts, Helen G., and Levine, Eugene. Health Manpower Source Book, Section 2—Nursing Personnel. Public Health Service Pub. No. 263. Washington, U.S. Government Printing Office, 1953, p. 65.

U.S. Department of Health, Education, and Welfare, Public Health Service, Division of Nursing. Nurses in Public Health. Public Health Service Pub. No. 785. Washington, U.S. Government Printing Office, 1964, pp. 11 and 13.

PART VIII

PROJECTIONS OF PROFESSIONAL NURSE SUPPLY

In 1962 the Surgeon General's Consultant Group on Nursing agreed that "to give the people of the United States, safe, therapeutically effective, and efficient nursing service," 850,000 professional nurses and 350,000 practical nurses would be needed by 1970. Taking into account the potential supply of students and the limited capacity of the initial professional nursing schools, the group decided that a more realistic goal would be a total of 680,000 professional nurses in active practice by 1970. Federal support programs for practical nurse education make it probable that the supply of practical nurses will reach the recommended number.[1]

In the best judgment of the consultant group, the need for nurses prepared for teaching and leadership positions is particularly critical and should have priority in planning. To meet this sector of needs, some 200,000 professional nurses of the 850,000 projected total should have at least a baccalaureate degree and another 100,000 should have graduate preparation. Within the goal of 680,000 professional nurses there should be 120,000 with academic degrees.[2]

How many new recruits to the initial programs of professional nursing will be needed to meet the goals set by the consultant group? It is expected that the Nurse Training Act of 1964 [3] will give impetus to the development and strengthening of nursing education and the recruitment of qualified candidates for admission to the professional nursing programs. Such impetus will be needed to meet even the feasible goal of 680,000 nurses in active practice by 1970. Because it is recognized that the need for 850,000 professional nurses is impossible of achievement by that year, this projection has been moved forward to 1975. Table 63 shows the approximate number of new graduations from initial programs of professional nursing education that will be necessary each year to reach the goals projected for 1970 and 1975, starting with the actual graduations of the academic year 1963–64.

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[1] U.S. Department of Health, Education, and Welfare. Toward Quality in Nursing: Needs and Goals. Report of the Surgeon General's Consultant Group on Nursing. Public Health Service Publication No. 992. Washington, U.S. Government Printing Office, 1963, p. 23.

[2] Ibid., pp. 19 and 22.

[3] The Nurse Training Act of 1964, Public Law 88–581, Sept. 4, 1964. (Title VIII of the "Public Health Service Act")

The net attrition rate used in tables 63, 66, and 67 represents: (a) annual losses to the profession through retirement, resignation, death, or inactive status, and (b) gains due to the return to practice of nurses formerly inactive, or the addition of foreign educated nurses. The 4 percent rate is a conservative estimate of net losses based on actual computations for the period 1950 to 1960, adapted from a method developed by the National League for Nursing.

If the annual graduations increase to 72,000 by 1974, and the attrition rate goes no higher than 4 percent, the estimate of 850,000 professional nurses in active practice is a feasible one for 1975.

For many years the overall completion rate for students entering schools of professional nursing directly from high school has been about 67 percent. Use of this factor as a base for determining admissions needed approximately 3 years prior to graduation results in an estimated need for 69,000 student admissions in 1964–65, increasing annually to 109,000 by 1972–73. This means by that time at least 5.5 percent of 17-year-old girls should be entering professional nursing schools each year (table 64).

If we are to meet the educational goals described in this section, the proportion of students entering the initial baccalaureate programs should continue to increase, and registered nurses going on to complete requirements for their baccalaureate and higher degrees must more than double. Distribution of these students in the various programs is shown in table 65.

Tables 66 and 67 show the estimated active professional nurse supply by 1975 if two different assumptions are made regarding numbers of graduates. Both projections assume an annual net attrition rate of 4 percent. Table 66 assumes that the graduations will increase by 2 percent a year. This was the average annual increase over the last 10 years. Table 67 makes the assumption that the 1963–64 graduation figure of approximately 35,000 will remain constant for the next 10 years. If this should actually occur and attrition does not decrease, the feasible goal recommended for 1970 will not be met until 1974.

All of the projections and estimates contained in this section have been rounded to the nearest hundred.

TABLES IN PART VIII

Projections of Professional Nurse Supply

Table 63. Graduates from initial programs of professional nursing needed annually if the goals for 1970 and 1975 are to be met

Table 64. Admissions to initial programs of professional nursing needed annually to reach the projected goals for 1970 and 1975 as a proportion of 17-year-old girls

Table 65. Admissions to professional nursing schools needed annually to reach the goals for 1970 and 1975, by type of program (part-time students are omitted from the projections)

Table 66. Estimated nurse supply to 1975 based on a 2 percent annual increase in graduations and a 4 percent attrition rate

Table 67. Estimated nurse supply to 1975 based on a constant 35,000 graduations and a 4 percent attrition rate

Table 63.—Graduates from initial programs of professional nursing needed annually if the goals for 1970 and 1975 are to be met

Academic year	Estimated number of active professional nurses	Graduates of initial programs needed to reach goals	Estimated net attrition (4 percent)	Net additions to nurse supply
1963–64	[1] 582, 000	[2] 35, 259	23, 300	12, 000
1964–65	594, 000	35, 000	23, 800	11, 200
1965–66	605, 200	35, 000	24, 200	10, 800
1966–67	616, 000	46, 000	24, 600	21, 400
1967–68	637, 400	46, 500	25, 500	21, 000
1968–69	658, 400	47, 900	26, 300	21, 600
1969–70	680, 000	53, 200	27, 200	36, 000
1970–71	706, 000	58, 800	28, 200	30, 600
1971–72	736, 600	63, 900	29, 500	34, 400
1972–73	771, 000	70, 200	30, 800	39, 400
1973–74	810, 400	72, 000	32, 400	39, 600
1974–75	850, 000			

[1] Estimated as of Jan. 1, 1964, by the Interagency Conference on Nursing Statistics.

[2] Actual graduations. National League for Nursing. State Approved Schools of Professional Nursing, 1965. New York, The League, 1965, p. 100.

Table 64.—Admissions to initial programs of professional nursing needed annually to reach the projected goal for 1970 and 1975 as a proportion of 17-year-old girls

Academic year	Estimated number 17-year-old girls [1]	Admissions to initial professional nursing programs needed	Admissions per 100 17-year-old girls
1964–65	1, 863, 000	68, 900	3. 7
1965–66	1, 750, 000	70, 000	4. 0
1966–67	1, 752, 000	75, 300	4. 3
1967–68	1, 738, 000	80, 000	4. 6
1968–69	1, 789, 000	87, 700	4. 9
1969–70	1, 834, 000	95, 400	5. 2
1970–71	1, 904, 000	104, 700	5. 5
1971–72	1, 942, 000	106, 800	5. 5
1972–73	1, 986, 000	109, 200	5. 5

[1] U.S. Department of Commerce, Bureau of the Census. Unpublished data for 50 States and Washington, D.C., consistent with projections in Current Population Reports, Series P–25, No. 286. Includes Armed Forces abroad. Estimates for Puerto Rico were made by Manpower Analysis and Resources Branch, Division of Nursing, and added to the census estimates.

Table 65.—Admissions to professional nursing schools needed annually to reach the goals for 1970 and 1975, by type of program (Part-time students are omitted from these projections.)

Academic year	Initial programs[1]				Post-R.N. programs[2]	
	Total	Diploma	Associate degree	Baccalaureate	Baccalaureate	Master's
1964–65	68, 900	52, 500	4, 400	12, 000	4, 000	2, 200
1965–66	70, 000	53, 000	4, 900	12, 100	4, 300	2, 600
1966–67	75, 300	56, 300	6, 500	12, 500	5, 000	3, 000
1967–68	80, 000	60, 000	7, 500	12, 500	6, 300	3, 400
1968–69	87, 700	63, 700	9, 000	15, 000	6, 200	3, 800
1969–70	95, 400	69, 000	10, 100	16, 300	6, 900	4, 100
1970–71	104, 700	71, 500	12, 200	21, 000	7, 500	4, 500
1971–72	106, 800	71, 500	13, 000	22, 300	8, 100	4, 900
1972–73	109, 200	71, 000	13, 700	24, 500	8, 700	5, 200

[1] Diploma programs are usually 3 years in length, associate degree programs are 2 years, and initial baccalaureate programs are generally of 4 years duration.

[2] Post-R.N. baccalaureate programs and higher degree programs vary in length depending upon the number of credits needed by the nurse to complete requirements for the degree.

Table 66.—Estimated nurse supply to 1975 based on a 2 percent annual increase in graduations and a 4 percent attrition rate

Academic year	Estimated number of active professional nurses	Graduates of initial programs	Estimated net attrition (4 percent)	Net additions to supply
1963–64	582, 000	35, 000	23, 300	11, 700
1964–65	593, 700	35, 700	23, 700	12, 000
1965–66	605, 700	36, 400	24, 200	12, 200
1966–67	617, 900	37, 100	24, 700	12, 400
1967–68	630, 300	37, 800	25, 200	12, 600
1968–69	642, 900	38, 600	25, 700	12, 900
1969–70	655, 800	39, 400	26, 200	13, 200
1970–71	669, 000	40, 200	26, 800	13, 400
1971–72	682, 400	41, 000	27, 300	13, 700
1972–73	696, 100	41, 800	27, 800	14, 000
1973–74	710, 100	42, 600	28, 400	14, 200
1974–75	724, 300			

Table 67.—Estimated nurse supply to 1975 based on a constant 35,000 graduations and a 4 percent attrition rate

Academic year	Estimated number of active professional nurses	Graduates of initial programs	Estimated net attrition (4 percent)	Net additions to supply
1963–64	582, 000	35, 000	23, 300	11, 700
1964–65	593, 700	35, 000	23, 700	11, 300
1965–66	605, 000	35, 000	24, 200	10, 800
1966–67	615, 800	35, 000	24, 600	10, 400
1967–68	626, 200	35, 000	25, 000	10, 000
1968–69	636, 200	35, 000	25, 400	9, 600
1969–70	645, 800	35, 000	25, 800	9, 200
1970–71	655, 000	35, 000	26, 200	8, 800
1971–72	663, 800	35, 000	26, 600	8, 400
1972–73	672, 200	35, 000	26, 900	8, 100
1973–74	680, 300	35, 000	27, 200	7, 800
1974–75	688, 100	....	....	....

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